CLARK COUNTY
RURAL INDUSTRIAL LAND BANK

Programmatic Environmental Review pursuant to RCW 36.70A.367 (2)(b), and

Addendum to the Clark County Comprehensive Growth Management Plan Final Environmental Impact Statement May 4, 2007

Prepared by:

BERK Consulting, in conjunction with:
Anchor QEA, LLC
Cairncross & Hempelman
MacKay Sposito
Kittelson & Associates Inc.

Prepared for:

Clark County Community Planning

October 2015

ADDENDUM OVERVIEW AND PURPOSE

PROPOSAL

Clark County is considering the establishment of a rural industrial land bank (RILB) as provided in the Growth Management Act (GMA; RCW 36.70A.367). Clark County received an application to establish the RILB on two properties that front SR-503 north of the Vancouver urban growth area (UGA): Ackerland property west of 117th Avenue, 223.72 acres and Lagler property east of 117th Avenue, 378.71 acres.

Designation of the RILB would allow large properties in rural areas to accommodate light industrial and manufacturing businesses, and limited commercial uses. Future development would need to be master planned and demonstrate consistency with the Clark County Comprehensive Plan, the Light Industrial Zone, and development standards requiring a perimeter landscaped buffer, water quality and air quality standards, critical areas regulations, stormwater standards, and adequate roadway, water, sewer, power and other infrastructure.

The Clark County Comprehensive Plan identifies the subject areas as agricultural lands of long-term commercial significance. Portions of the properties are identified as Railroad Industrial Reserve or Industrial Reserve. As part of designating the RILB, the properties would be de-designated from agricultural lands of long-term commercial significance, designated as a RILB, and rezoned as Light Industrial (IL).

Based on the requirements of GMA, alternative locations for the RILB have been considered. An inventory identified five sites – one site in the Vancouver Urban Growth Area (UGA) and four non-UGA sites including the docket site for analysis as alternative sites:

- Site 1 is the subject docket site north of the Vancouver UGA straddling SR 503.
- Site 2 is adjacent to and north of the Ridgefield UGA along I-5.
- Site 3 lies between the Vancouver and Ridgefield UGAs along I-5 at SR 502.
- Site 4 is adjacent eastward of the Vancouver city limits.
- Site 5 consists of the Section 30 subarea plan site in eastern Vancouver city limits.

All sites were considered for industrial or employment center purposes in the Clark County 2007 Comprehensive Plan Environmental Impact Statement (EIS). The City of Vancouver led a subarea plan for Section 30 and development agreements were prepared in 2009. Environmental review was conducted with the subarea plan and also has occurred as developments have been proposed.

PURPOSE OF ADDENDUM

Clark County has prepared this Addendum in order to evaluate and disclose potential environmental impacts and mitigating measures associated with the Proposal. The Addendum is a companion document to the analysis contained in the following EIS:

- Clark County Comprehensive Growth Management Plan Final EIS, May 2007

This Addendum builds on the analysis contained in the prior EIS, but does not significantly change the analysis, nor identify new or significantly different impacts. This addendum to the 2007 EIS is in the form of a programmatic environmental review consistent with the GMA at RCW 36.70A.367 (2)(b). The Addendum analysis indicates that the Revised Proposal will result in similar impacts as alternatives

studied in the prior EIS. Because the Proposal contains a master concept plan and development regulations designed to assure compliance with the County code to reduce potential impacts to the natural and built environment, no new impacts beyond those studied previously are anticipated.

ADDENDUM CONTENTS

In accordance with the State Environmental Policy Act (SEPA) Rules (WAC 197-11) an addendum may be issued for any SEPA document, and there is no set format.

RCW 36.70A.367 (2) requires that the environmental review for amendment of the comprehensive plan be at the programmatic level. In addition to a threshold determination, the programmatic environmental review must include:

1. An inventory of developable land as provided in RCW 36.70A.365; and
2. An analysis of the availability of alternative sites within UGAs and the long-term annexation feasibility of sites outside of UGAs (RCW 37.70A.367(2)(b)).

This Addendum includes this Addendum Overview and Purpose plus the following documents:

Part I. Inventory

Part II. Alternative Sites Analysis

Part III. Appendices

Appendix A: Conceptual Plans, including Master Plan Objectives and Perimeter Setback Cross Sections

Appendix B: Agricultural De-Designation Analysis

Appendix C: Critical Areas Reports for Docket and Alternative Sites

Appendix D: Docket Application Checklist

Appendix E: Utilities Analysis, Docket Site

Appendix F: Transportation Analysis, Docket Site

Appendix G: 2007 EIS Summary Excerpt

ADDENDUM DISTRIBUTION AND AVAILABILITY

The Determination of Significance and Notice of Adoption, together with this addendum is available at: http://www.clark.wa.gov/planning/landbank/.

Notice of new documents posted to the website has been provide to interested persons who have elected to sign up for notices at the above link.

Consistent with SEPA Rules, the County will circulate the Addendum to recipients of the Final EIS together with the Determination of Significance and Adoption of Existing Environmental Document prior to the County's decision on the proposal.

COMMENTS

Comments on the addendum will be taken for 14 days after the date of issuance of this notice (October 21, 2015). Comments may be sent as follows:

- Post a comment online: Engage Clark County
- Send us an email at: commplanning@clark.wa.gov
- Mail your comments:
  Clark County Community Planning
  Attn: Rural Industrial Land Bank
  P.O. Box 9810, Vancouver, WA 98666-9810

APPEALS

SEPA appeals shall be filed in writing with the Board of County Councilors within fourteen (14) calendar days of the close of the comment period (November 4, 2015). Any SEPA appeal shall be decided by the Board in conjunction with its decision on the underlying recommendation.

ADDENDUM PART I. INVENTORY

CLARK COUNTY
RURAL INDUSTRIAL LAND BANK

Programmatic Environmental Review pursuant to RCW 36.70A.367(2)(b): Inventory of Possible Industrial Land Bank Areas

Prepared by:

BERK Consulting, in conjunction with

Cairncross & Hempelman

MacKay Sposito

Kittelson & Associates, Inc.

Prepared for:

Clark County Community Planning

March 2015 / Revised September 2015

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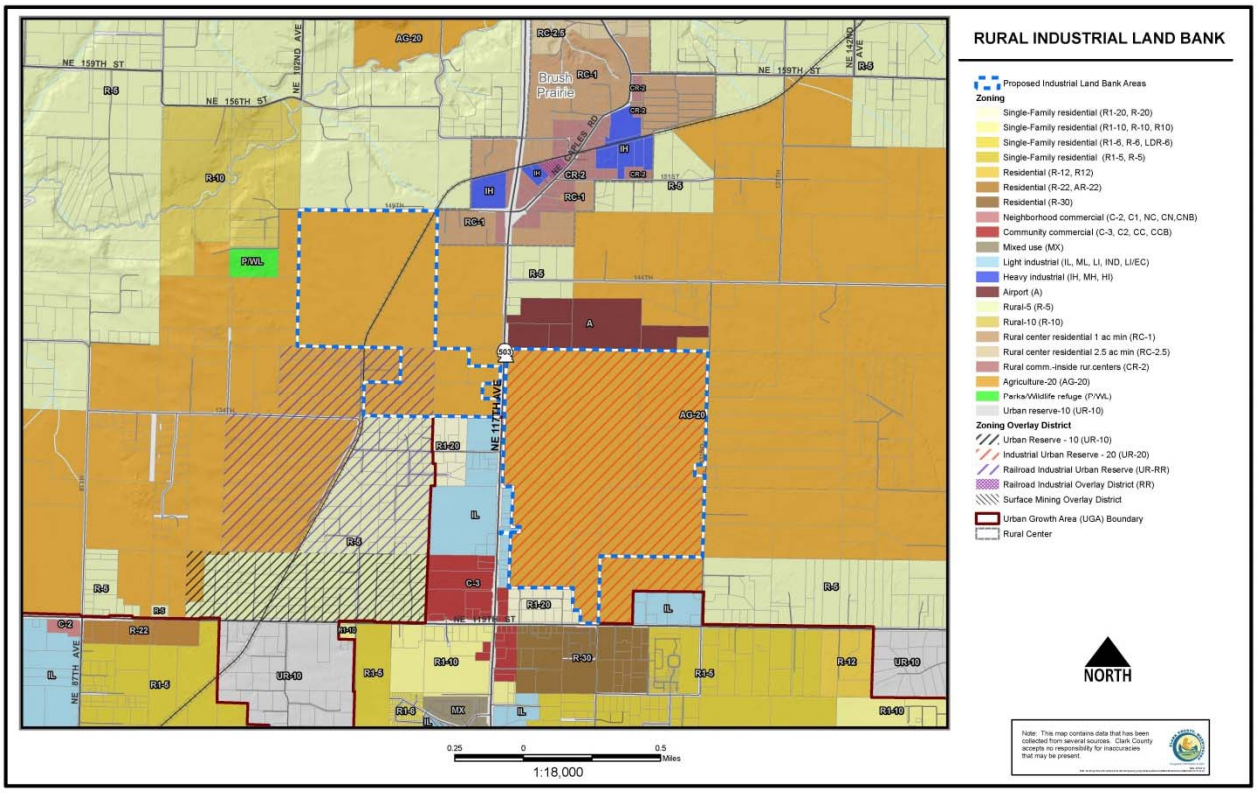
1.0 INTRODUCTION

In 1996, the Growth Management Act (GMA), RCW 36.70A, was amended with provisions to allow major industrial developments to be sited outside of urban growth areas (UGAs). RCW 36.70A.367 allows counties to establish up to two rural industrial land banks (RILBs) with the intent that they develop as industrial properties. In 2014, Clark County received a docket application to establish an RILB on properties that straddle SR 503 north of the Vancouver UGA:

- Ackerland property west of 117th Avenue, 223.72 acres.
- Lagler property east of 117th Avenue, 378.71 acres.

Exhibit 1 below shows these areas. Presently the zoning for both properties is Agriculture (AG-20). The requested zoning is Light Industrial (IL). The IL zone uses are listed in Clark County Code (CCC) Section 40.230.085.

Exhibit 1. Ackerland and Lagler Properties



Source: Clark County GIS August 2014

The Clark County Comprehensive Plan identifies the subject areas as agricultural lands of long-term commercial significance. Portions of the properties are identified as Railroad Industrial Reserve or Industrial Reserve. No zoning implementing Comprehensive Plan overlays has been applied to the subject properties.

The sites were studied for a variety of agricultural and employment uses, including urban industrial uses, in a 2007 Environmental Impact Statement (EIS). Prior Comprehensive Plan amendments included the properties in the Vancouver UGA, but the expansions were removed after a Growth Management

Hearings Board determination and compliance order requiring the County to do so based on the agricultural land status. The sites have not previously been evaluated as part of potential RILB.

Clark County's approach to the RILB docket application is to:

- consider site requirements for industrial sites and identify possible areas for designation as an RILB; and
- analyze those possible RILB areas to identify the best place for an RILB and pursue re-designation and rezoning of the identified RILB location.

This document presents criteria on what makes a suitable industrial site and begins to screen properties with those criteria to identify possible RLIB alternative sites. The document contains the following sections:

1. Introduction
2. Key Steps in Rural Industrial Land Bank Process
3. Locations Suited to Major Industrial Development
   a. Prior Studies of Suitable Employment Land
   b. Industrial Criteria and RILB Inventory Analysis
4. Candidate Alternative Sites and Next Steps

2.0 KEY STEPS IN RURAL INDUSTRIAL LAND BANK PROCESS

GMA allows consideration of major industrial activity outside UGAs. The process involves "[d]esignation of an industrial land bank area in the comprehensive plan; and subsequent approval of specific major industrial developments through a local master plan process ..." (RCW 36.70A.367(2)) Key steps in the RILB process include the following:

- Identifying locations suited to major industrial use,
- Identifying the maximum size of the bank area,
- Developing a programmatic environmental review with an inventory of developable land and alternative sites, and
- Developing comprehensive plan amendments and development regulations for the bank and future specific major industrial developments.

The requirements of RCW 36.70A.367 are further described below:

A. Locations: The Comprehensive Plan must identify locations suited to major industrial development because of their proximity to transportation or resource assets. The plan must identify the maximum size of the industrial land bank area and any limitations on major industrial developments based on local limiting factors, but the plan does not need to specify a particular parcel or parcels of property or identify any specific use or user. In selecting locations for the industrial land bank area, priority must be given to locations that are adjacent to, or in close proximity to, a UGA (RCW 36.70A.367(2)(a)).

B. Programmatic Environmental Review: The environmental review for amendment of the comprehensive plan must be at the programmatic level, and, in addition to a threshold determination, must include:

1. An inventory of developable land as provided in RCW 36.70A.365; and

2. An analysis of the availability of alternative sites within UGAs and the long-term annexation feasibility of sites outside of UGAs (RCW 37.70A.367(2)(b)).

C. **Comprehensive Plan Amendments:** Final approval of an industrial land bank area under this section must be by amendment to the comprehensive plan adopted under RCW 36.70A.070. The amendment may be done at any time and is not subject to the once-a-year limitation on revising the comprehensive plan RCW 36.70A.130(2). Approval of a specific major industrial development within the industrial land bank area requires no further amendment of the comprehensive plan (RCW 36.70A.367(2)(c)).

D. **Development Regulations:** In concert with the designation of an industrial land bank area, the County is required to adopt development regulations for review and approval of specific major industrial developments through a master plan process (RCW 36.70A.367(3)).

3.0 LOCATIONS SUITED TO MAJOR INDUSTRIAL DEVELOPMENT

The purpose of this document is to address Key Steps A and B listed above – identify sites suited to major industrial development and to prepare an inventory of developable land and available and alternative sites. The inventory (Step B.1) references RCW 36.70A.365 as providing a method:

> *RCW 36.70A.365(h) An inventory of developable land has been conducted and the county has determined and entered findings that land suitable to site the major industrial development is unavailable within the urban growth area [UGA]. Priority shall be given to applications for sites that are adjacent to or in close proximity to the urban growth area.*

RCW 36.70A.365(h) indicates the need to demonstrate that land suitable to major industrial development is unavailable within the UGA and that priority is to be given to sites adjacent to or in close proximity to a UGA.

In developing an inventory for the RILB, the County wished to consider available studies and supplement it as needed with further analysis. Prior studies and the present analysis are described below.

3.1 Prior Studies of Suitable Employment Land

A recent study was developed by the Columbia River Economic Development Council (CREDC). The CREDC established a Land for Jobs Committee the 2011 and completed the *Clark County Employment Land Inventory.* The process included the following steps:

- Define employment land as it relates to Clark County's economic development goals.
- Inventory currently undeveloped and underdeveloped employment land.
- Evaluate the current employment land inventory and its level of readiness to support development.
- Make recommendations to local leaders and appropriate parties for the preparation and preservation of employment land to meet current and future economic development goals.

The CREDC analysis was based on the County's Vacant Buildable Lands Model (VBLM) developed to analyze residential, commercial, and industrial lands within UGAs. Given the focus on economic development, the CREDC study addressed commercial and industrial land suitability in UGAs.

The commercial and industrial zoned properties in the VBLM were evaluated on a number of criteria including proximity to water, sewer, presence of critical areas, arterial access, and common ownership. The CREDC's study found:

- Of the 70 potential employment land sites 15 are constrained by critical lands or geologic hazards, 27 are not in proximity to water service, 38 are not near sewer service, 43 have poor or challenging access, and 30 have multiple owners.
- 31 identified sites are in proximity (100 ft.) of both water and sewer service.
- Only 3 of the sites in the inventory of 70 sites were 100 acres or larger.
- 12 properties, in total, are found to be under common ownership, have water and sewer access, and are easily accessible from a highway or minor arterial road and only 7 of these were zoned for industrial uses.

The 2011 study found that the majority of commercial and industrial development has occurred on sites 10 acres or less. There were few large sites in the analysis. The report concluded that large parcels of land are important in future progress, and that smaller parcels may continue to be critical to subsequent growth countywide.

Several of the VBLM sites in the CREDC study are partially developed with buildings taking up a portion of the site and others have been already approved for master planned developments in progress (for example, Section 30 in the Vancouver UGA). Most of the VBLM commercial and industrial sites are not within a 0.5 mile of a State designated freight route.

3.2 Industrial Criteria and RILB Inventory Analysis

The CREDC study has determined few large sites are available in the UGA. The CREDC study, however, does not address sites in non-UGA areas.

The RILB statute indicates the County must consider the availability of alternative sites within UGAs as well as the long-term annexation feasibility of sites outside of UGAs. (RCW 36.70A.367(2)(b)(ii)). The law also describes a number of criteria for the RILB related to size, access, etc. Therefore, Industrial Site Criteria have been developed for the purposes of this RILB inventory; they are similar to and more detailed than those in the CREDC study. See Exhibit 2.

Fundamental to the criteria is identifying land that is consistent with the County's economic development strategy and policies:

- **Policy:** The Clark County Comprehensive Plan identifies that Industrial Reserves should be 100 acres or more in size (Policy 1.6.2) and that new industrial sites in a major industrial land bank must have a minimum of 75 acres or more and shall not be subdivided less than 50 acres. Further, RILB sites must be zoned as Light Industrial (IL) (CCC 40.520.075). (See criteria 15, 16 and 21).
- **Strategy:** The Clark County Economic Development Plan (commissioned by CREDC in 2011), identifies target industries: technology, industry including traditional light manufacturing and distribution of goods, and professional and healthcare services. This plan is considered in the criteria (See criterion 21).

In addition to economic development policies and strategies, the criteria in Exhibit 2 also address a number of practical considerations regarding utilities, topography and site configuration as well as compatibility.

The purpose of the Industrial Site Criteria is to identify conditions under which industrial uses may be suitable to create an inventory of potential industrial sites for study that may then be further evaluated as alternatives. The analysis allows the County to consider the needs of industrial uses in general before analyzing the particular docket site that is to be considered.

Exhibit 2. Industrial Site Criteria

Utilities
1. System Development Charges • High costs • Medium costs • Low costs
2. Process Water - Capacity and adjacency (Volume and disposal; national averages) Capacity • High Tech Manufacturing 3 million gallons per day (GPD) • Light Industrial 20,000 - 40,000 GPD Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property
3. Potable Water - Capacity and adjacency (Volume) Capacity • High Tech Manufacturing 3 million gallons per day (GPD) • Light Industrial 20,000 - 40,000 GPD Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property
4. Fire Flow – Capacity and adjacency Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property Capacity • 1,200-1,800 gallons per day (preferred capacity) • 800-1,200 gallons per day (adequate capacity) • 400-800 gallons per day (minimal required capacity) Pressure • 95+ (exceeds pressure required) • 45-75 psi (preferred range) • 35 and lower (undesirable)
5. Sewer - Availability to wastewater disposal *(Clark Regional Wastewater District)* Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property

Capacity

- High Tech Manufacturing 2.4 million gallons per day (GPD)
- Light Industrial 20,000-40,000 GPD

6. Power - (Clark Public Utility)

Adjacency

- Adjacent to the property (within 100' of property)
- Within one mile of the property
- Further than one mile of the property

Capacity

- High Tech Manufacturing 2 separate sources at 115KV or 20 MW continuous
- Light Industrial 5,500 KW peak demand; 3,000,000 KWH/Month, 75% demand factor

Costs

- High
- Medium
- Low

7.* Natural Gas- Proximity, capacity, predictability, continuity, affordability *(Northwest Natural)

Adjacency

- Adjacent to the property (within 100' of property)
- Within one mile of the property
- Further than one mile of the property

Capacity

- High Tech Manufacturing 2,000 MCF @ 8 PSI
- 50,000 therms or 5,000 MCF/Month

Costs

- High
- Medium
- Low

8. Telecommunications - *(varies)*

Adjacency

- Adjacent to the property (within 100' of property)
- Within one mile of the property
- Further than one mile of the property

Physical Parcel Constraints

9. Site Topography

- 0-8% Slopes (highly developable)
- 8-15% Slopes (moderately developable)
- 15%+ Slopes (undesirable)

10. Soils

- Hydric soils (wetlands)
- Infiltration capacity (High, Medium or Low)

- Foundation bearing capacity (High, Medium or Low)
- Seismic vulnerability (High, Medium or Low)
- Moisture content (High, Medium or Low)
- Spill containment, (High, Medium or Low)

11. Presence of sensitive onsite critical areas (e.g. wetlands, floodplains, aquifer recharge areas/wellhead protection areas, fish and wildlife habitat conservation areas, geologic hazards)

- Yes
- No

12. Environmental Contaminants (prior uses, including Agriculture)

- Yes (High, Medium or Low contamination)
- No

13. Geometry of the parcel(s)

- Rectangular (preferred)
- Square (acceptable)
- Broken parcels (unacceptable)
- Common ownership (may assist parcel geometry to be acceptable or preferred instead of unacceptable)
- 400' parcel depths or conglomeration to make these depths (preferred)
- 100 acres minimum parcel requirement (contiguous property preferred)
  - **Policy 1.6.2.** The Industrial Reserve Area overlay should be applied at certain freeway or arterial interchanges or other sites well served by existing or planned transportation systems, or adjacent to technological or research related uses associated with industrial uses. The IRA designation shall be applied in a limited number locations, in contiguous areas of 100 acres or more.
  - **Policy 9.3.1, last bullet.** New industrial sites that are part of a major industrial land bank shall be required to have a minimum of 75 acres or more and shall not be subdivided less than 50 acres.
- Adjacent parcels allows for future expansion

14. Ownership

- Common ownership of properties (minimal acquisition time)
- Multiple ownerships (maximum acquisition time)

Land Use

15. Comprehensive Plan and Zoning

- Identified for commercial or industrial purposes through designation or overlay, or zoned for such
- Agricultural lands of long-term commercial significance / Agricultural-20 zone

16. Compatibility

- Industrial friendly neighborhoods: Adjacent Industrial or commercial zones, limited conflict with residential uses, common adjacent land uses and zoning
- Visual quality - Ability to provide a buffer or increase quality of development
- Proximity to complementary/ancillary uses
- Proximity to employee workforce
- Proximity to housing options

Transportation
17. Transportation impact fee burden • High Costs • Medium Costs • Low Cost
18. Access to a Regional Roadway Facility • Convenient access (less than 0.5 mile driving distance) to a major road or minor or major arterial roadway facility as designated by the Clark County Arterial Atlas • Convenient access to a designated freight route. The Washington State Freight and Goods Transportation System (FGTS) Classification System designates roadways and railways based on tonnage. Roadways designated at T-1 or T-2 are considered to be Strategic Freight Corridors. The T-1 designation represents roadways carrying more than 10 million tons per year while the T-2 designation represents roadways carrying 4 million to 10 million tons per year. Per WSDOT, the FGTS is primarily used to establish funding eligibility for Freight Mobility Strategic Investment Board (FMSIB) grants, fulfill federal reporting requirements, support transportation planning process, and plan for pavement needs and upgrades. • Balances site circulation and access needs with regional mobility • Site circulation provides for appropriate separation between freight, employee, and nearby neighborhood access • More than one access point • Site is located in proximity to existing and planned residential areas within the County to ensure convenient access for employees
19. Rail Access • Adjacent to site (within 100' of property) • Rail Spur could be extended (1 mile length maximum) • Mainline can be easily accessed (5 mile radius maximum)
20. Travel time to International Airport • 20 minutes preferred • 40 minutes acceptable • 40 minutes or more undesirable
Other criteria
21. Ability to accommodate desired Economic Development Plan and Light Industrial Zoning Uses Suitability for existing industrial cluster or targeted cluster consistent with the Clark County Economic Development Plan (commissioned by CREDC in 2011), and compatibility with Light Industrial (IL) zone uses [CCC 40.230.085 Employment Districts (IL, IH, IR, BP)]. See Appendix A for more details.

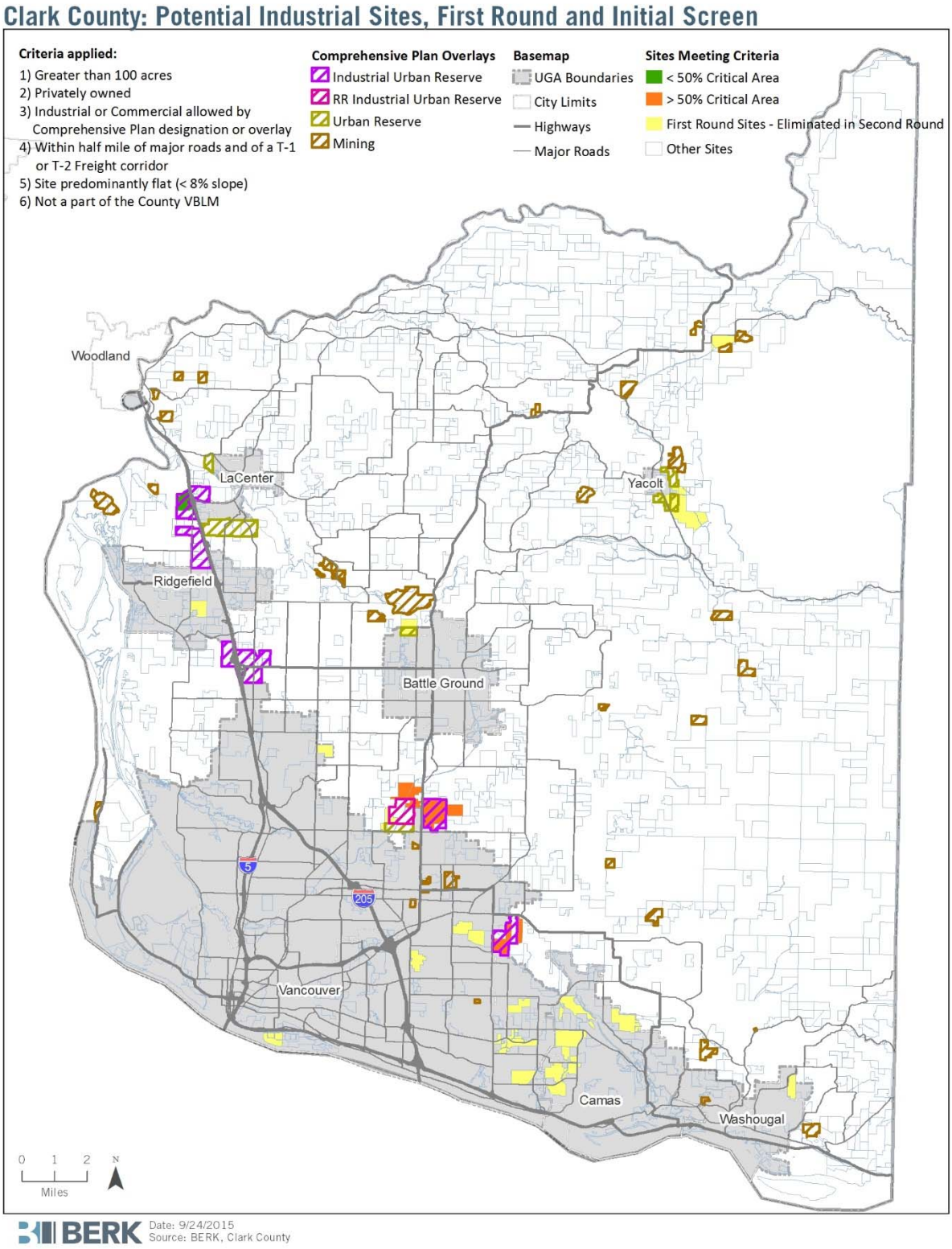
First Round, Initial Screen Results

A test of the criteria was made in a first round of analysis. Corresponding to the criteria numbers above, the initial screen used geographic information system (GIS) data to identify sites with the following characteristics:

- 13 – size and privately owned,
- 15 – commercial or industrial land use designation,
- 18 – proximity to roads (at the time based on designated major roads not freight routes),
- 9 – slopes, and
- 11 – critical areas.

The initial screen considered sites across the County inside and outside of UGAs. Exhibit 2 shows potential industrial sites that met initial site criteria in the first round.

Exhibit 3. First Round Initial Screen of Potential Industrial Sites Greater than 100 Acres



Source: Clark County GIS and BERK Consulting 2014

Second Screen, Revised Results

The initial screen proved valuable to make corrections due to changed circumstances in land ownership and classification, and to consider more refined criteria. Changes include:

- **Corrected Boundaries:** As a result of initial evaluation some incorrect UGA boundaries along the northern Battle Ground and Washougal UGAs were corrected to match more recent County information and Growth Management Hearings Board decisions.
- **Changes in Ownership and Purpose:** A site west of La Center purchased for tribal purposes was suitable but no longer available for fee simple ownership and is being identified for other tribal purposes; thus the site was removed from consideration.
- **Transportation and Freight Criteria:** Criteria regarding transportation facilities were also amended including extending the distance to arterials from 0.25 to 0.5 miles, and by adding a criteria regarding access to freight routes also within 0.5 miles. Large sites within a half mile of an arterial and freight route could support industrial activities. Designated freight routes identified as T-1 or T-2 by Washington Statement Department of Transportation signify Strategic Freight Corridors. The T-1 designation represents roadways carrying more than 10 million tons per year while the T-2 designation represents roadways carrying 4 million to 10 million tons per year.
- **UGA Sites already included in CREDC Study:** UGA sites were already addressed in the CREDC's 2011 study with similar criteria, and vetted by a committee; they included sites inventoried in the County's VBLM. Thus, these sites were eliminated in the second screening, to focus on the non-UGA sites that were not previously screened. Recommendations for UGA sites are made below in reference to the CREDC study.

Following are the revised, GIS-based criteria applied in the second round screen. The second screen considers sites that are:

1) Greater than 100 acres;

2) Privately owned;

3) Industrial or Commercial as allowed by Comprehensive Plan designation or overlay;

4) Within half mile of major roads and of a T-1 or T-2 Freight corridor;

5) Predominantly flat (< 8% slope); and

6) Not a part of the County VBLM.

Non-UGA sites: Exhibit 3 shows the sites meeting the updated second screen criteria. Two sites appear to meet the revised screening criteria and lie adjacent to UGAs – the RILB application site (Site 1) and another site to the southeast (Site 4).

Two additional sites on Exhibit 3 (Site 2 and Site 3 along I-5) meet the above criteria except that they are between 50-75 acres under common ownership. These two sites are located within an Industrial Reserve Overlay area that is larger than 100 acres, and, thus, they are included as candidate alternative sites.

UGA sites: The 2011 CREDC study identified the following sites as greater than 100 acres and potentially ready to develop within 18-36 months:

- Site 41, Section 30, Industrial, 224.81 acres, Vancouver
- Site 42, Section 30, Industrial, 100.19 acres, Vancouver

One other site (#65, Gateway) at the Port of Vancouver was identified at 500 acres in size along the Columbia River and was considered less ready to develop (readiness at greater than 36 months); the site was considered to have access to water and arterials, but not to sewer. It is also publicly owned at this time.

Sites 41 and 42 combined appear to be similar to the non-UGA sites in that they are under private ownership and have potential access to water, sewer, and arterials. They are shown on Exhibit as "Site 5" collectively.

4.0 CANDIDATE ALTERNATIVE SITES AND NEXT STEPS

The County will need to study alternative sites adjacent to the UGA and within the UGA. Based on the inventory described in this document, the following non-UGA sites are recommended to be carried forward as candidate alternative sites (see Exhibit 4):

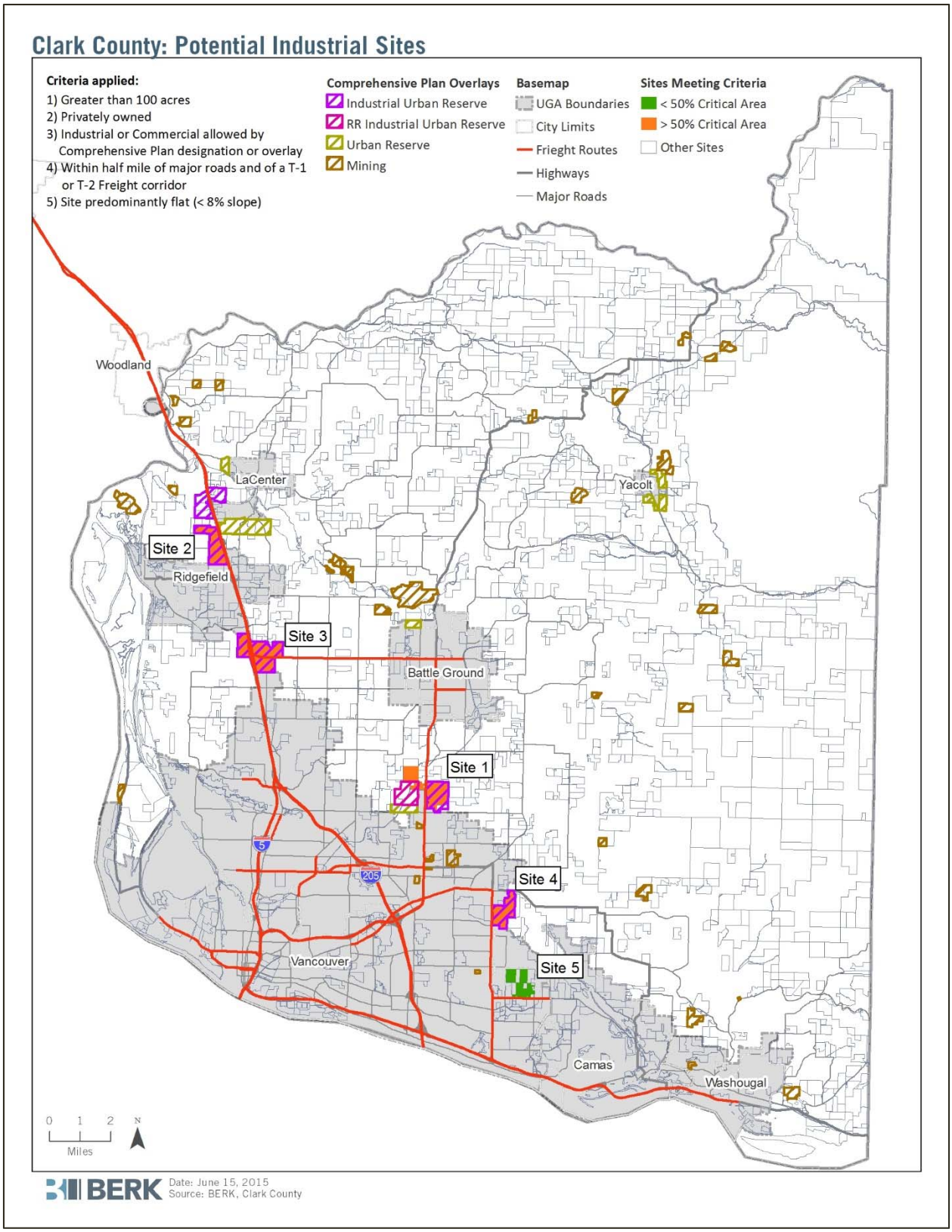
- Site 1 is the subject docket site north of the Vancouver UGA.
- Site 2 is adjacent to the Ridgefield UGA.
- Site 3 lies between the Vancouver and Ridgefield UGAs.
- Site 4 is adjacent eastward of the Vancouver city limits.

All four non-UGA sites are in Industrial Land Reserve Overlays. All except Site 3 have predominantly AG-20 zoning. Site 3 has predominantly Rural Comprehensive Plan designations implemented by Rural-5 and Rural Commercial zoning as well as some AG-20 zoning. All sites lie outside of a UGA but lie adjacent to one or more UGA. Following the more detailed criteria review, these sites would be considered candidate locations for an Industrial Land Bank area.

The consultant team suggests studying at least one UGA location for comparison sake. Two Section 30 properties identified as Sites 41 and 42 in the CREDC study are shown as Site 5 on Exhibit 4. They are two of the three larger sites studied by the CREDC and have greater readiness for development than the third large Port-owned site (Site 65). Both Sites 41 and 42 would be studied together as candidate Site 5.

Each of these sites is proposed for review as alternative sites in greater detail applying the criteria in Exhibit 2. Once evaluated the sites will be part of the environmental analysis required in the RILB review process.

Exhibit 4. Second Screen and Candidate Sites Selected for Further Evaluation



Source: Clark County GIS, BERK Consulting 2014

APPENDIX A. INDUSTRIAL CRITERIA – ECONOMIC DEVELOPMENT AND LIGHT INDUSTRIAL USES

This appendix provides more detail on the types of industry sectors addressed in the Clark County Economic Development Plan and allowed in the County's Light Industrial Zone.

Industrial Uses – Economic Development Plan and Light Industrial Zone
Suitability for existing industrial cluster or targeted cluster consistent with the Clark County Economic Development Plan (commissioned by CREDC in 2011), and compatibility with Light Industrial (IL) zone uses [CCC 40.230.085 Employment Districts (IL, IH, IR, BP)].

• Technology
  o Manufacturing. of instruments & devices for medicine & science
  o Manufacturing of components for solar energy production
  o Data processing, software, & broadcast media
  o R&D services
  o Related IL Zone Uses
  • Computer and electronic product manufacturing
  • Publishing industries
  • Motion picture and sound recording industries
  • Broadcasting (except Internet)
  • Internet publishing and broadcasting
  • Telecommunications

• Industry (traditional light manufacturing and distribution of goods where allowed by IL zone)
  o Food manufacturing, beverage and tobacco product manufacturing
  o Logistics & distribution, wholesale trade, transportation and warehousing (rail, truck, transit, pipeline, freight, etc.), warehousing and storage
  o Other IL zone uses
  • Utilities
  • Construction
  • Textiles, apparel, footwear, and other leather and allied product manufacturing
  • Truss and other wood product manufacturing
  • Converted paper product manufacturing, printing, and related activities
  • Pharmaceutical and medicine manufacturing
  • Pharmaceutical and medicine manufacturing
  • Soap, cleaning compound, and toilet preparation manufacturing
  • Plastics and rubber products manufacturing
  • Clay product and refractory manufacturing
  • Glass and glass product manufacturing
  • Cement and concrete product manufacturing
  • Fabricated metal product manufacturing
  • Machinery manufacturing
  • Electrical equipment, appliance, and component manufacturing
  • Transportation equipment manufacturing

Industrial Uses – Economic Development Plan and Light Industrial Zone
• Furniture and related product manufacturing • Miscellaneous manufacturing
• Professional Services o Wealth management services o Computer & engineering services o Related IL Zone Uses • Internet service providers, web search portals, and data processing services • Other information services • Professional, Scientific, and Technical Services • Management of Companies and Enterprises
• Healthcare Services o Centralized services o Related IL Zone Uses • Ambulatory health care services

Based on the Clark County Economic Development Plan, the CREDC is focusing the following targeted industry sectors, addressing technology, traditional light manufacturing and distribution of goods, and professional and healthcare services.[1]

[1] http://www.clark.wa.gov/planning/2016update/documents/FINAL_Clark-County-ED-Plan-9_2011.pdf

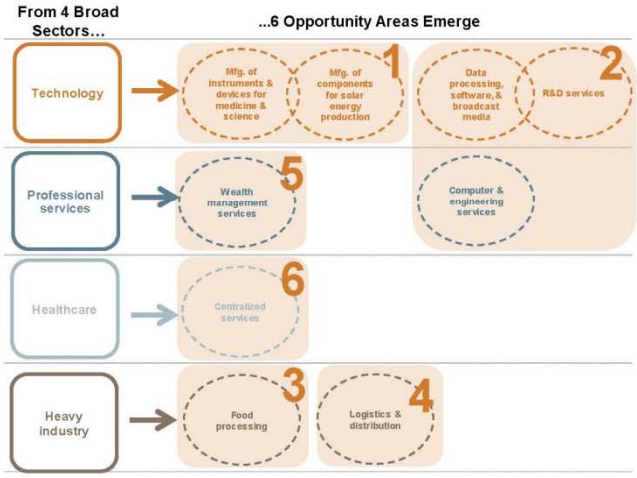
Clark County, Washington

INDUSTRY OUTLOOK

Figure 61

Proposed target industries

Industries with job growth potential that also suit Clark County's capacity



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APPENDIX C: TARGET INDUSTRY ANALYSIS

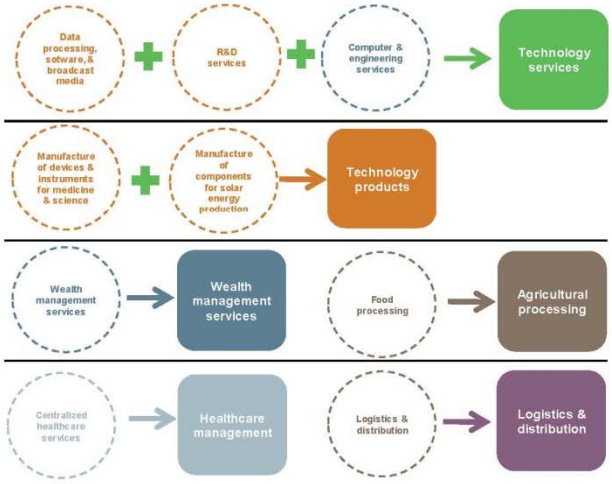
Clark County, Washington

INDUSTRY OUTLOOK

Figure 62

Proposed target industries

Industries with job growth potential that also suit Clark County's capacity



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APPENDIX C: TARGET INDUSTRY ANALYSIS

ADDENDUM PART II. ALTERNATIVE SITES ANALYSIS

CLARK COUNTY
RURAL INDUSTRIAL LAND BANK

Programmatic Environmental Review pursuant to RCW 36.70A.367 (2)(b): Alternative Sites Analysis

Prepared by:

BERK Consulting, in conjunction with:
Anchor QEA, LLC
Cairncross & Hempelman
MacKay Sposito
Kittelson & Associates Inc.

Prepared for:

Clark County Community Planning

September 2015

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Appendix C: Critical Areas Reports for Docket and Alternative Sites

Appendix D: Docket Application Checklist

Appendix E: Utilities Analysis, Docket Site

Appendix F: Transportation Analysis, Docket Site

Appendix G: 2007 EIS Summary Excerpt

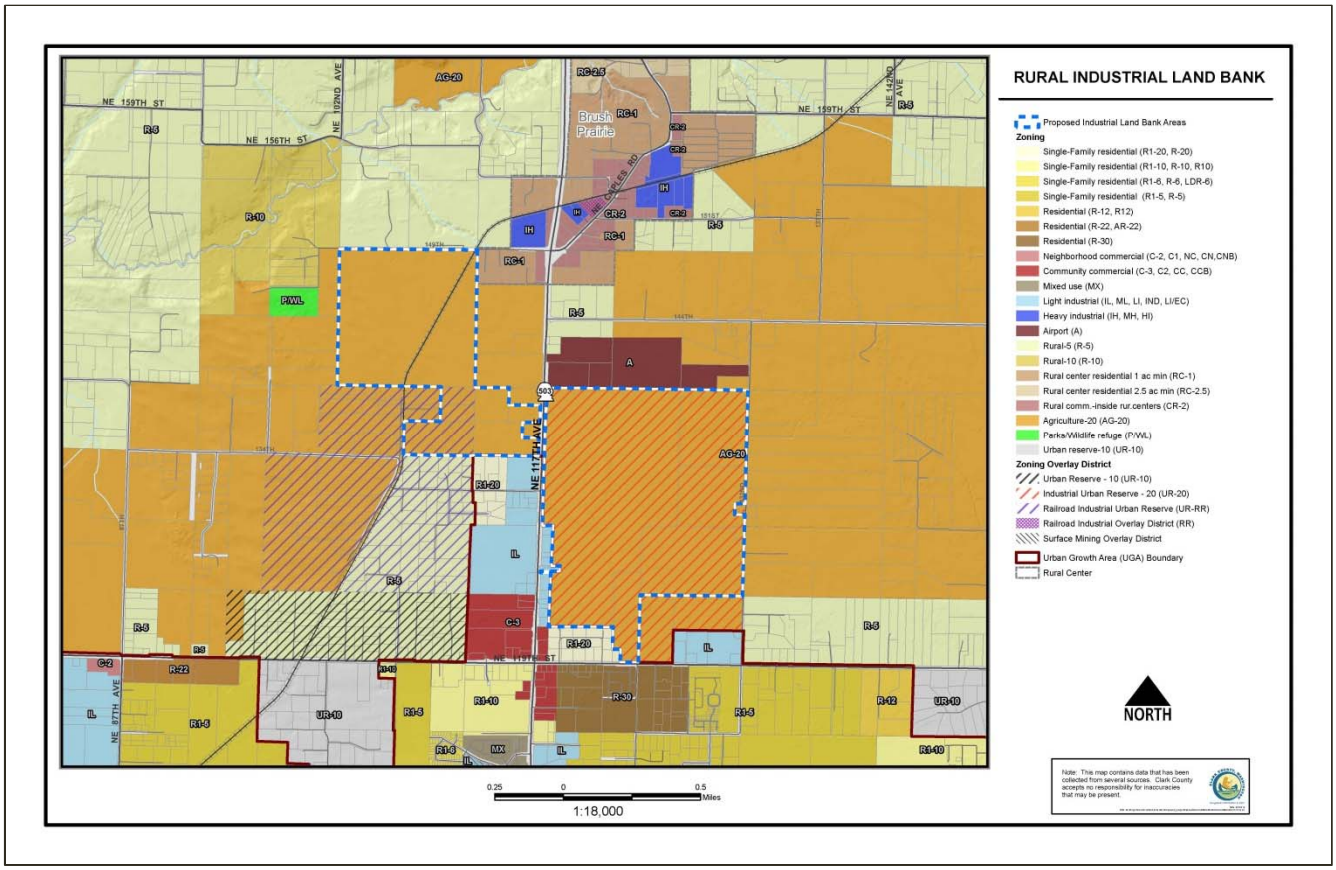
1.0 INTRODUCTION AND PURPOSE

Clark County is considering the establishment of a rural industrial land bank (RILB) as provided in the GMA under RCW 36.70A.367. Clark County received a docket application to establish the RILB on two properties that front SR-503 north of the Vancouver UGA:

- Ackerland property west of 117th Avenue, 223.72 acres.
- Lagler property east of 117th Avenue, 378.71 acres.

Exhibit 1 below shows these areas. Presently the zoning for both properties is Agriculture (AG-20). The requested zoning is Light Industrial (IL). The IL zone uses are listed in Clark County Code (CCC) Section 40.230.085.

Exhibit 1. Ackerland and Lagler Properties



Source: Clark County GIS August 2014

The Clark County Comprehensive Plan identifies the subject areas as agricultural lands of long-term commercial significance. Portions of the properties are identified as Railroad Industrial Reserve or Industrial Reserve. No zoning implementing Comprehensive Plan overlays has been applied to the subject properties.

The sites were studied for a variety of agricultural and employment uses, including urban industrial uses, in a 2007 Environmental Impact Statement (EIS). Prior Comprehensive Plan amendments included the properties in the Vancouver UGA, but the expansions were removed after a Growth Management Hearings Board determination and compliance order requiring the County to do so based on the agricultural land status. The sites have not previously been evaluated as part of potential RILB.

Clark County's approach to the RILB docket application is to:

- consider site requirements for industrial sites and identify possible areas for designation as an RILB; and
- analyze those possible RILB areas to identify the best place for an RILB and pursue re-designation and rezoning of the identified RILB location.

This Alternative Sites Analysis builds on the "Inventory of Possible Industrial Land Bank Areas" prepared in March 2015 by BERK Consulting et al. and presented at a public workshop in April 2015; the report was revised in September 2015. That inventory identified five sites – one site in the Urban Growth Area (UGA) and four non-UGA sites including the docket site for analysis as candidate alternative sites. The five sites are listed below and shown in Exhibit 2:

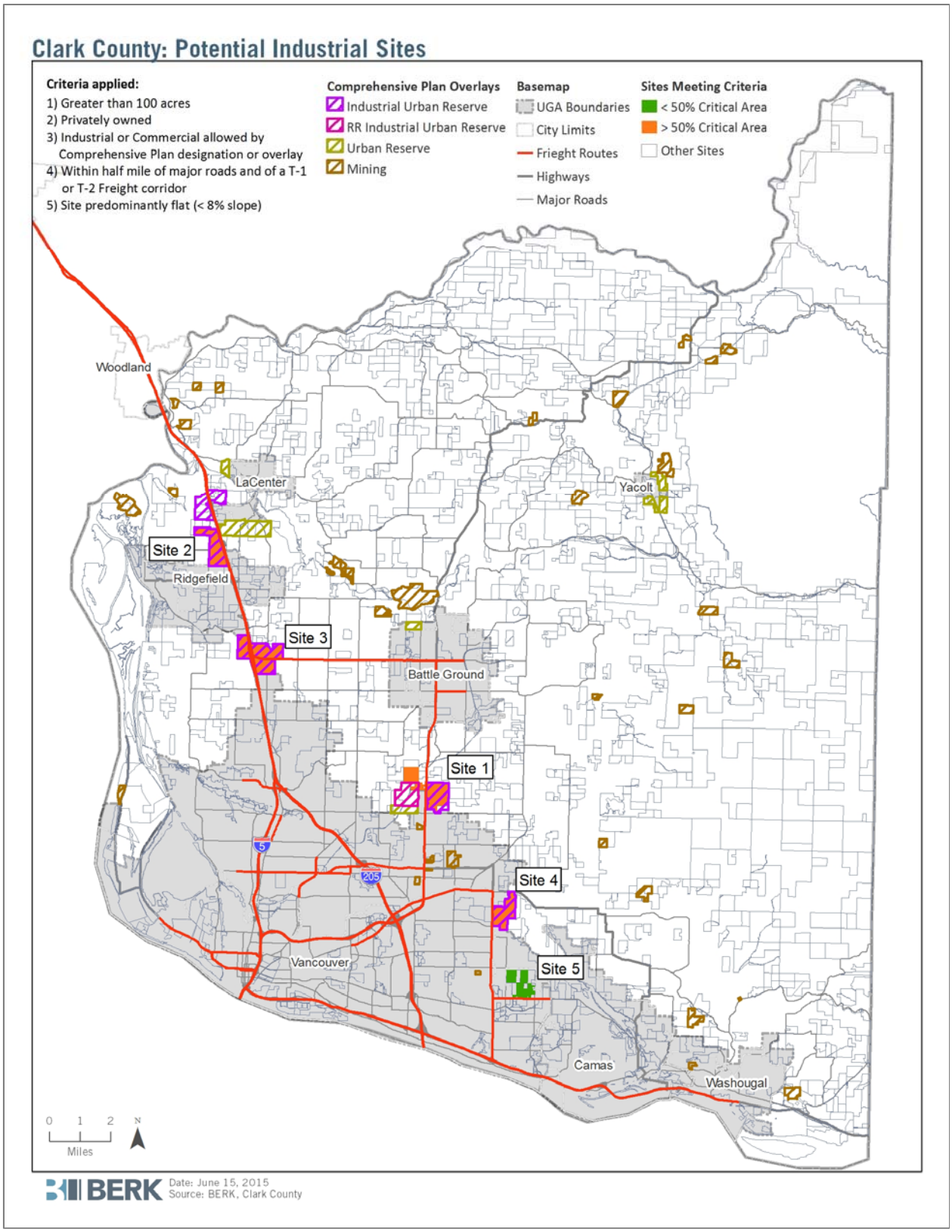
- Site 1 is the subject docket site north of the Vancouver UGA.
- Site 2 is adjacent to the Ridgefield UGA.
- Site 3 lies between the Vancouver and Ridgefield UGAs.
- Site 4 is adjacent eastward of the Vancouver city limits.
- Site 5 consists of the Section 30 subarea plan site where the 2011 the *Clark County Employment Land Inventory* prepared by the Columbia River Economic Development Council (CREDC) studied two larger industrial properties.

This Alternative Sites Analysis document provides a comparative analysis of the sites using the criteria for what makes a good industrial site and provides a programmatic environmental review of the RILB application including: An analysis of the availability of alternative sites within UGAs and the long-term annexation feasibility of sites outside of UGAs (RCW 37.70A.367(2)(b)). This document includes the following sections:

1. Introduction and Purpose
2. Key Steps in Rural Industrial Land Bank Process
3. Criteria for Industrial Sites
4. Prior and Current Studies of Sites
5. Assessment Comparison of Sites
6. References

   Appendix A: Conceptual Plans, including Master Plan Objectives and Perimeter Setback Cross Sections
   Appendix B: Agricultural Lands Analysis
   Appendix C: Critical Areas Reports for Docket and Alternative Sites
   Appendix D: Docket Application Checklist
   Appendix E: Utilities Analysis, Docket Site
   Appendix F: Transportation Analysis, Docket Site
   Appendix G: 2007 EIS Summary Excerpt

Exhibit 2. Alternative Sites



Source: BERK Consulting, June 2015

2.0 KEY STEPS IN RURAL INDUSTRIAL LAND BANK PROCESS

GMA allows consideration of major industrial activity outside UGAs. The process involves "[d]esignation of an industrial land bank area in the comprehensive plan; and subsequent approval of specific major industrial developments through a local master plan process ..." (RCW 36.70A.367(2)) Key steps in the RILB process include the following:

A. **Locations:** The Comprehensive Plan must identify locations suited to major industrial development because of their proximity to transportation or resource assets. The plan must identify the maximum size of the industrial land bank area and any limitations on major industrial developments based on local limiting factors, but the plan does not need to specify a particular parcel or parcels of property or identify any specific use or user. In selecting locations for the industrial land bank area, priority must be given to locations that are adjacent to, or in close proximity to, a UGA (RCW 36.70A.367(2)(a)).

B. **Programmatic Environmental Review:** The environmental review for amendment of the comprehensive plan must be at the programmatic level, and, in addition to a threshold determination, must include:

   1. An inventory of developable land as provided in RCW 36.70A.365; and
   2. An analysis of the availability of alternative sites within UGAs and the long-term annexation feasibility of sites outside of UGAs (RCW 37.70A.367(2)(b)).

C. **Comprehensive Plan Amendments:** Final approval of an industrial land bank area under this section must be by amendment to the comprehensive plan adopted under RCW 36.70A.070. The amendment may be done at any time and is not subject to the once-a-year limitation on revising the comprehensive plan RCW 36.70A.130(2). Approval of a specific major industrial development within the industrial land bank area requires no further amendment of the comprehensive plan (RCW 36.70A.367(2)(c)).

D. **Development Regulations:** In concert with the designation of an industrial land bank area, the County is required to adopt development regulations for review and approval of specific major industrial developments through a master plan process (RCW 36.70A.367(3)).

Previously the "Inventory of Possible Industrial Land Bank Areas" prepared in March 2015 by BERK Consulting et al. and updated in September 2015 addresses Step A and B.1 by identifying potential criteria for a site and developing an inventory.

This Draft Alterative Sites Analysis addresses Step B.2. Under separate cover, a draft code has been prepared for Step D. Comprehensive Plan Amendments in Step C would be prepared when a site or sites is proposed for designation so that the appropriate amendments may be developed.

3.0 CRITERIA FOR INDUSTRIAL SITES

As described in the "Clark County Rural Industrial Land Bank: Inventory of Possible Industrial Land Bank Areas" (March 2015/Revised September 2015) industrial site criteria have been developed that address policy and practical considerations regarding what makes a good industrial site. See Exhibit 3. Topics address land use, economic development, utilities, topography and site configuration as well as compatibility. These criteria serve as evaluation criteria for the candidate alternative sites.

Exhibit 3. Industrial Site Criteria

Utilities
1. System Development Charges • High costs • Medium costs • Low costs
2. Process Water - Capacity and adjacency (Volume and disposal; national averages) Capacity • High Tech Manufacturing 3 million gallons per day (GPD) • Light Industrial 20,000 - 40,000 GPD Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property
3. Potable Water - Capacity and adjacency (Volume) Capacity • High Tech Manufacturing 3 million gallons per day (GPD) • Light Industrial 20,000 - 40,000 GPD Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property
4. Fire Flow – Capacity and adjacency Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property Capacity • 1,200-1,800 gallons per day (preferred capacity) • 800-1,200 gallons per day (adequate capacity) • 400-800 gallons per day (minimal required capacity) Pressure • 95+ (exceeds pressure required) • 45-75 psi (preferred range) • 35 and lower (undesirable)
5. Sewer - Availability to wastewater disposal *(Clark Regional Wastewater District)* Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property Capacity • High Tech Manufacturing 2.4 million gallons per day (GPD) • Light Industrial 20,000-40,000 GPD

6. Power - (Clark Public Utility)

Adjacency

- Adjacent to the property (within 100' of property)
- Within one mile of the property
- Further than one mile of the property

Capacity

- High Tech Manufacturing 2 separate sources at 115KV or 20 MW continuous
- Light Industrial 5,500 KW peak demand; 3,000,000 KWH/Month, 75% demand factor

Costs

- High
- Medium
- Low

7. Natural Gas- Proximity, capacity, predictability, continuity, affordability *(Northwest Natural)*

Adjacency

- Adjacent to the property (within 100' of property)
- Within one mile of the property
- Further than one mile of the property

Capacity

- High Tech Manufacturing 2,000 MCF @ 8 PSI
- 50,000 therms or 5,000 MCF/Month

Costs

- High
- Medium
- Low

8. Telecommunications - *(varies)*

Adjacency

- Adjacent to the property (within 100' of property)
- Within one mile of the property
- Further than one mile of the property

Physical Parcel Constraints

9. Site Topography

- 0-8% Slopes (highly developable)
- 8-15% Slopes (moderately developable)
- 15%+ Slopes (undesirable)

10. Soils

- Hydric soils (wetlands)
- Infiltration capacity (High, Medium or Low)
- Foundation bearing capacity (High, Medium or Low)
- Seismic vulnerability (High, Medium or Low)
- Moisture content (High, Medium or Low)
- Spill containment, (High, Medium or Low)

11. Presence of sensitive onsite critical areas (e.g. wetlands, floodplains, aquifer recharge areas/wellhead protection areas, fish and wildlife habitat conservation areas, geologic hazards)

- Yes
- No

12. Environmental Contaminants (prior uses, including Agriculture)

- Yes (High, Medium or Low contamination)
- No

13. Geometry of the parcel(s)
    - Rectangular (preferred)
    - Square (acceptable)
    - Broken parcels (unacceptable)
    - Common ownership (may assist parcel geometry to be acceptable or preferred instead of unacceptable)
    - 400' parcel depths or conglomeration to make these depths (preferred)
    - 100 acres minimum parcel requirement (contiguous property preferred)
    - **Policy 1.6.2.** The Industrial Reserve Area overlay should be applied at certain freeway or arterial interchanges or other sites well served by existing or planned transportation systems, or adjacent to technological or research related uses associated with industrial uses. The IRA designation shall be applied in a limited number locations, in contiguous areas of 100 acres or more.
    - **Policy 9.3.1, last bullet.** New industrial sites that are part of a major industrial land bank shall be required to have a minimum of 75 acres or more and shall not be subdivided less than 50 acres.
    - Adjacent parcels allows for future expansion
14. Ownership
    - Common ownership of properties (minimal acquisition time)
    - Multiple ownerships (maximum acquisition time)

Land Use

15. Comprehensive Plan and Zoning
    - Identified for commercial or industrial purposes through designation or overlay, or zoned for such
    - Agricultural lands of long-term commercial significance / Agricultural-20 zone
16. Compatibility
    - Industrial friendly neighborhoods: Adjacent Industrial or commercial zones, limited conflict with residential uses, common adjacent land uses and zoning
    - Visual quality - Ability to provide a buffer or increase quality of development
    - Proximity to complementary/ancillary uses
    - Proximity to employee workforce
    - Proximity to housing options

Transportation

17. Transportation impact fee burden
    - High Costs
    - Medium Costs
    - Low Cost
18. Access to a Regional Roadway Facility
    - Convenient access (less than 0.5 mile driving distance) to a major road or minor or major arterial roadway facility as designated by the Clark County Arterial Atlas
    - Convenient access to a designated freight route. The Washington State Freight and Goods Transportation System (FGTS) Classification System designates roadways and railways based on tonnage. Roadways designated at T-1 or T-2 are considered to be Strategic Freight Corridors. The T-1 designation represents roadways carrying more than 10 million tons per year while the T-2 designation represents roadways carrying 4 million to 10 million tons per year. Per WSDOT, the FGTS is primarily used to establish funding eligibility for Freight Mobility Strategic Investment Board (FMSIB) grants, fulfill federal reporting requirements, support transportation planning process, and plan for pavement needs and upgrades.
    - Balances site circulation and access needs with regional mobility
    - Site circulation provides for appropriate separation between freight, employee, and nearby neighborhood access
    - More than one access point
    - Site is located in proximity to existing and planned residential areas within the County to ensure convenient access for employees
19. Rail Access
    - Adjacent to site (within 100' of property)
    - Rail Spur could be extended (1 mile length maximum)
    - Mainline can be easily accessed (5 mile radius maximum)

20. Travel time to International Airport • 20 minutes preferred • 40 minutes acceptable • 40 minutes or more undesirable
Other criteria
21. Ability to accommodate desired Economic Development Plan and Light Industrial Zoning Uses Suitability for existing industrial cluster or targeted cluster consistent with the Clark County Economic Development Plan (commissioned by CREDC in 2011), and compatibility with Light Industrial (IL) zone uses [CCC 40.230.085 Employment Districts (IL, IH, IR, BP)]. See Appendix A for more details.

4.0 PRIOR AND CURRENT STUDIES OF SITES

All non-UGA sites were considered for industrial or employment center purposes in the 2007 Comprehensive Plan EIS; see the Alternative 3 map in Exhibit 4. Site 1 was also part of the Preferred Alternative in the Final EIS.

The 2007 EIS considered a range of natural and built environment topics addressing the cumulative effects of the subject Sites 1-4 becoming urban and changing to employment uses along with other urban and rural growth proposals. The implications of growth impacts to ecosystems, potential to convert agricultural resource lands to other land uses, disturbance of critical areas, increase in impervious area, increased demand for services, and contribution to traffic were evaluated. Policies, programs, and codes to reduce impacts were also identified.

This Alternative Sites Analysis similarly reviews the natural environment (critical areas), agricultural resources and land use, transportation, and utilities topics important to the potential designation of an RILB.

Two Section 30 properties are shown as Site 5 on Exhibit 2. The site was the subject of a subarea plan in 2004 and was annexed in 2008 and considered an employment center; a city led subarea plan and development agreements were prepared in 2009. See Appendix A for a subarea plan map. Environmental review has occurred as developments have been proposed.

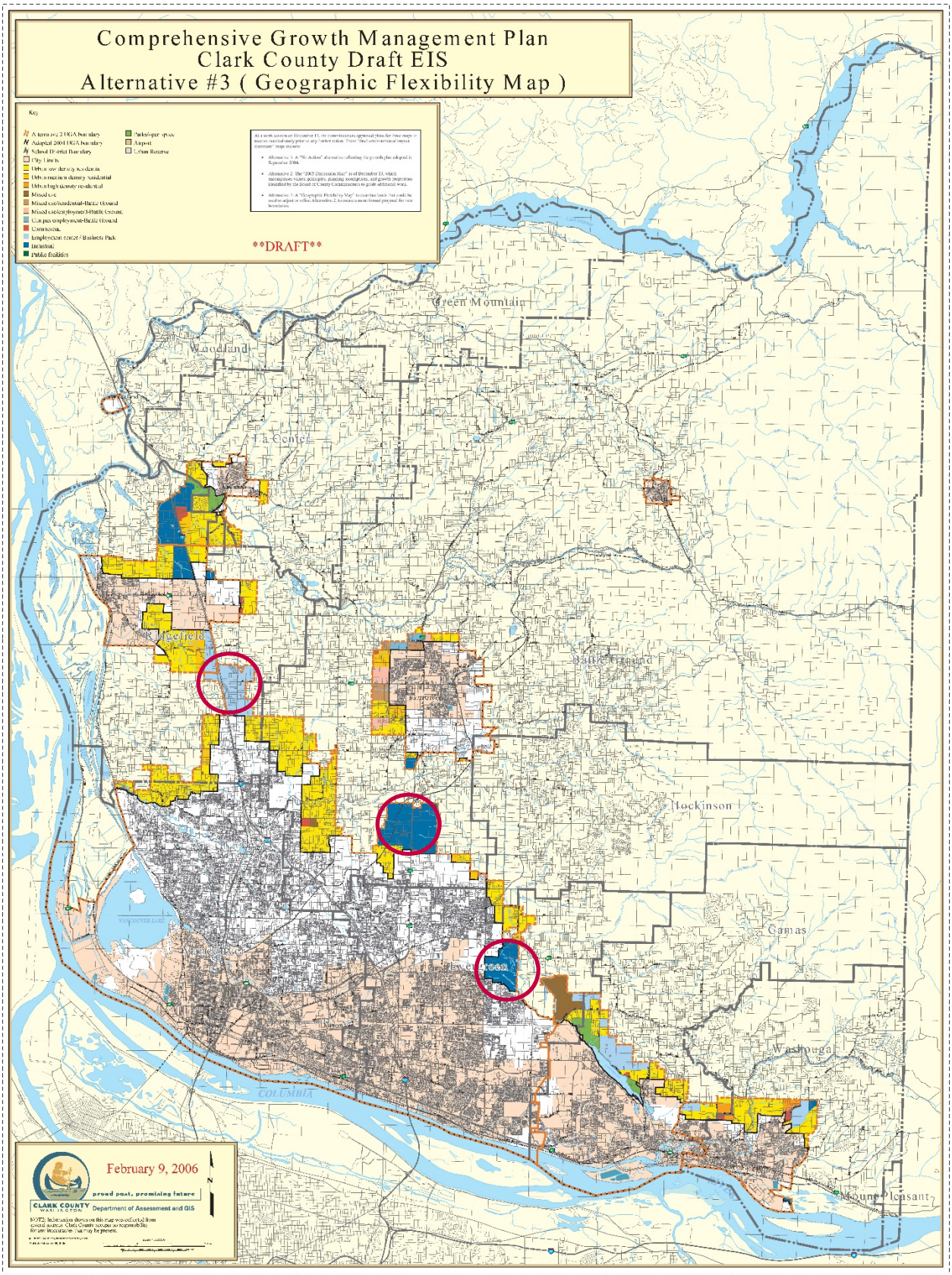
The potential to convert land in agricultural use to employment uses is considered in the Agricultural De-Designation analysis for all non-UGA Sites 1-4 (see Appendix B). All non-UGA Sites 1-4 have been reviewed at a planning level for critical areas presence in Appendix C. Section 30 plans have already considered environmental constraints and protections for Site 5.

Regarding Site 1 itself, the docket application has been considered (see Appendix D for the application SEPA checklist).

As part of preparing a concept plan (Appendix A) for Site 1, additional focused analysis has been prepared by the consultant team regarding utilities and transportation. See Appendix E Utilities Plan and Appendix F Transportation Study.

These prior and recent environmental studies have been considered in the evaluation of the Alternative sites in this report.

Exhibit 4. 2007 EIS Alternative 3



Source: Clark County 2006

5.0 ASSESSMENT COMPARISON OF SITES

Alternative Comparisons

Each site has been reviewed at a planning level for developability, and concept plans prepared (see Appendix A). Exhibit 5 shows basic information about site size and location for each alternative location. Considering site concept plans, presence of critical areas, and roads, each has different configuration and ability to be developed.

Site 4 has the most extensive critical areas and appears to have limited developability – about 6% of the total site area. The two developable areas mapped on Site 4 are separated by extensive critical areas. Appendix C indicates "Buffers on streams and wetlands as well as floodway development restrictions and the presence of a Bonneville Power Administration utility corridor would likely significantly limit buildable acreage at the site." Thus this site is not further evaluated across all the industrial site criteria for what makes for a good industrial site. Prior environmental analysis in the 2007 EIS may be considered for Site 4.

Exhibit 5. Site Feature Comparison: Sites 1 through 5

Feature & Criteria	Site 1	Site 2	Site 3	Site 4	Site 5
a. Location	Docket: SR 503 & NE 119th Street	Ridgefield North: NW 31st Avenue & N 10th Street	North of Vancouver UGA and South of Ridgefield: I-5 and SR 502 Junction	Anderson Dairy, East of Vancouver city limits at NE 162nd Avenue and SR 500	Section 30, Vancouver city limits, NE 172nd and NE 18th
b. Primary Address	13207 NE 117th Ave, Vancouver, 98662 (east) 10901 NE 149th St, Brush Prairie, 98606 (west)	Multiple owners, agriculture use.	Multiple owners.	4507 NE 162nd Ave, Vancouver, 98682	Multiple owners.
c. UGA Adjacency	Vancouver UGA abuts to south	Ridgefield UGA abuts to south	Ridgefield UGA abuts to north and Vancouver UGA abuts to south.	Vancouver UGA to west	Inside Vancouver city limits
d. Gross parcel acres	602	412	764	366	325
e. Net Buildable Acres (Appendix A), estimated	378	179	219	23.5	Some grading and arterial needs. Percent buildable on two sites likely high but unknown.
f. Percent Developable, estimated	63%	43%	29%	6%	If subarea planned industrial and industrial office land uses occur on two sites: 66% potential industrial use.

Sources: Clark County GIS; City of Vancouver; MacKay Sposito; Anchor QEA LLC

Sites 1, 2, 3 and 5 are further evaluated in Exhibit 6 across all criteria. Information is based on information gathered from planning documents, website resources, and field observations. See Chapter 6, References and Appendices. Comparative analysis about the sites include:

- **Ability to Develop and Topography – All Sites:** Site 1 has the most area under 8% slope which is considered a feature important for an industrial site. Site 1 appears to have more acres available for industrial development potential (378 acres) than all sites, urban or rural. The second site with 213-325 acres of potential industrial area is Section 30. The low range is the estimated land demand in the subarea plan and the upper end are the total parcel acres of sites in CREDC study; the upper end likely overstates potential for development due to slopes and internal access that would be needed.
- **Critical Areas – Rural Sites:** Based on a site tour completed for the candidate alternative Sites 2, 3, and 4 in comparison to Site 1 where a reconnaissance was performed, the mapped environmental constraints at Sites 2-4, appear to be more significant than those mapped for Site 1, in particular due to topographical features, the presence of mapped fish bearing streams, and mapped floodways that are not present on Site 1. While each site contains mapped wetlands, the wetland features of the candidate alternative sites are more directly adjacent to mapped streams or other wetland features and exist within less disturbed or undeveloped habitat, whereas wetlands that may exist within Site 1 would all occur within agricultural lands. The available environmental information and visible site characteristics at the candidate alternative sites support the premise that development potential is more environmentally constrained at these sites than at Site 1.
- **Critical Areas – Urban Site:** As a site that was formerly mined in part, there are no mapped or known wetlands or streams. Site 5 has some geological hazards (steep slopes; landslide hazard areas) and wellhead protection areas. A challenge to developing the site includes multiple ownerships and the need to execute a coordinated grading plan.
- **Agricultural Lands of Long-Term Significance:** All sites in the non-UGA areas would result in a change from agricultural to industrial use if an RILB is approved. The sites meet some agricultural classification criteria and do not meet other classification criteria as identified in Appendix B.
- **Utilities:** Sites 1, 3, and 5 have access to water lines though upgrades for industrial use would likely be needed. All sites would require extension of sewer service. A conceptual sewer plan has been submitted by Site 1 applicant based on coordination with the Clark Regional Wastewater District. Through a Subarea Plan, Site 5 has a coordinated sewer plan. Site 2 has the least available adjacent utilities currently.
- **Transportation:** Sites 1, 3 and 5 have access to major roads and abut freight routes. Site 2 does not have direct access to I-5 and its network abutting the site is rural in nature. The road network would not substantively change if industrial uses were located in Sites 2 and 3 beyond the layout that exists today. With Site 1, the County could advance greater east-west connectivity per its proposed arterial plan and would help distribute traffic associated with the industrial development. Site 1 is the only site with rail access.
- **Coordinated Development and Land Use Compatibility:** All sites abut urban growth boundaries, and other properties with urban and rural uses. Site 1 with two common owners and large parcel sizes could be master planned with regional stormwater and wetland protection and perimeter buffer compatibility measures included. Sites 2 and 3 have multiple owners and a more complex pattern of critical areas that would make a coordinated development pattern with compatibility measures more challenging to implement. Site 5 is larger and has been planned in a coordinated way, but challenges include multiple property owners and differential topography.

Note: Site 4 has the most extensive critical areas and appears to have limited developability – about 6% of the total site area. Thus this site is not further evaluated across all the industrial site criteria for what makes for a good industrial site in Exhibit 6.

Exhibit 6. Matrix Evaluation of Sites with Industrial Site Criteria: Sites 1, 2, 3, and 5

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
Water: Service Provider	Clark Public Utilities	Potential: City of Ridgefield	Clark Public Utilities	City of Vancouver
1. System Development Charges: High costs, Medium costs, Low costs	Charges to be determined. Published rate for 8" water meter is $ 475,130 (2012). No published rate for 12".	Charges to be determined. City of Ridgefield: 1.5x In-City SDC (Per Meter Equivalent Size (MES)) For each MES $3,950.00 8" water meter is 80 MES. At 1.5 times: $474,000. No published rate for 12".	Charges to be determined. Published rate for 8" water meter is $ 475,130 (2012). No published rate for 12".	Charges to be determined. Rate per one MES $2,360.00 (2010). Meter Size 8" = 80.0 MES. Equal to: $188,800. Meter Size 12" = 231.0 MES. Equal to: $545,160.
2. Process Water - Capacity and adjacency (Volume and disposal; national averages)				
Capacity: High Tech Manufacturing 3 million gallons per day (GPD); Light Industrial 20,000 - 40,000 GPD	Usage depends on future user but would be consistent with IL Zone if RILB is designated. Water service to the project would need to be extended along the major roadways to provide water for processing, potable water needs, and fire protection. It is anticipated that water main extensions would need to be at least 12" diameter and improvements to the existing off-site water system will likely be required to increase capacity to the site.	Usage depends on future user but would be consistent with IL Zone if RILB is designated. There is no water infrastructure within the site area. Water service would need to be extended to site to provide for process water.	Usage depends on future user but would be consistent with IL Zone if RILB is designated. Water mains would likely need to be upgraded for industrial use.	The City of Vancouver will be the purveyor of water as Section 30 develops. The Section 30 utility concept plans show the approximate location of the water mains needed to complete a connected system to serve Section 30. Twelve inch water mains should be sufficient for most development; however, if an exceptionally large water user were to locate in Section 30, additional improvements may be necessary to handle the intensive industrial water needs.
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	Current Infrastructure is adjacent to the property: Water Mains in NE 117th Ave (SR 503) (10"/12" Water Main), NE 119th Street (12" Water Main), and NE 144th Street (12" Water Main), NE 124th Street (12" Water Main)	There is no water infrastructure within the site area. Both City of Ridgefield and Clark Public Utility water lines lie to the east of the site east of I-5 about 350 feet from the eastern edge of the parcel. The size of these is water pipes is 8-inch diameter. Additionally, there is an existing 12-inch diameter water line about 0.3 miles south of the site in the City of Ridgefield.	Water lines are present on the eastern edge of the property east of I-5. The size of the water lines are unknown. There are no water lines west of I-5 in the vicinity of the site.	A few 12 inch water distribution mains exist within portions of the street right-of-ways located along the boundaries of the plan area.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
3. Potable Water - Capacity and adjacency (Volume)				
Capacity: High Tech Manufacturing 3 million gallons per day (GPD); Light Industrial 20,000 - 40,000 GPD	See #2 above.	See #2 above.	See #2 above.	See #2 above.
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	See #2 above.	See #2 above.	See #2 above.	See #2 above.
4. Fire Flow – Capacity and adjacency				
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	See #2 above. Hydrants adjacent.	See #2 above. No water lines or hydrants in site, and would need to be extended.	See #2 above. Hydrants located where there are businesses along NE 10th and 219th on the east side of I-5.	See #2 above. Hydrants are located on peripheral streets.
Capacity • 1,200-1,800 gallons per day (preferred capacity) • 800-1,200 gallons per day (adequate capacity) • 400-800 gallons per day (minimal required capacity)	See #2 above.	See #2 above.	See #2 above.	See #2 above.
Pressure • 95+ (exceeds pressure required) • 45-75 psi (preferred range) • 35 and lower (undesirable)	See #2 above.	See #2 above.	See #2 above.	See #2 above.
5. Sewer / Wastewater Provider	Potential: Clark Regional Wastewater District.	Potential: Clark Regional Wastewater District or City of Ridgefield	Potential: Clark Regional Wastewater District or City of Ridgefield	City of Vancouver Potential: Site 41 Served: Site 42
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	Within 1 mile. Gravity sewer main is present in NE 124th Avenue about 1000 feet south of the property (i.e. south of NE 119th Avenue, at the intersection of NE 124TH Avenue and NE 114th Street).	No sewer lines in site or abutting land. Exists within one mile of the property. City of Ridgefield Comprehensive Sewer plans show extension south of the site. New forcemain and pump	Further than one mile south of the site is a small (4-inch diameter) forcemain. This force main would not have capacity for an industrial development. Gravity sewer lines are further south in the Vancouver UGA or further north in the Ridgefield UGA (about 3 miles	Gravity sewer service to existing sewer mains is not feasible for most of Section 30. A 12-inch sanitary sewer main is located near the intersection of SE 1st Street and NE 192nd Avenue. This main will provide a discharge

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
	Conceptual plan for extension prepared with docket application.	station planned south of N 10th per 2013 Sewer Plan. Site not in analysis of plan.	north to gravity sewer lines in the City of Ridgefield). Clark Regional Wastewater District has some of this area included in its 2013 Comprehensive Plan Update (Basin #48). A pump station is proposed near 209th Street on the east side of I-5. Additionally, City of Ridgefield Comprehensive Sewer plans show extension of sewer to area just north of the site. New forcemain and pump station planned on NW Carty Road per 2013 Sewer Plan. Site not in analysis of plan.	point for domestic sewage pumped from Section 30.
Capacity: High Tech Manufacturing 2.4 million gallons per day (GPD); Light Industrial 20,000-40,000 GPD	Sewer service to this project would be provided through the construction of two sanitary lift stations. On-site sanitary sewer would gravity drain to one of the two lift stations. The northern lift station would pump to the southern pump lift station; the southern lift station would pump to the existing off-site sanitary sewer system in NE 124th Avenue. Area was considered for inclusion in UGA in 2007 Environmental Impact Statement, and calculated as part of potential sewer flows and costs in Alternative 3 and the Preferred Alternative.	Area not currently planned for inclusion in sewer planning area. Area was considered for inclusion in UGA in 2007 Environmental Impact Statement, and calculated as part of potential sewer flows and costs in Alternative 3.	Area was considered for inclusion in UGA in 2007 Environmental Impact Statement, and calculated as part of potential sewer flows and costs in Alternative 3.	The City of Vancouver will be the purveyor of sanitary sewer as Section 30 develops. The utility concept plans show the approximate location of the sewer mains needed to complete a connected system to serve Section 30. Twelve inch sanitary sewer mains should be sufficient for most development; however, if an exceptionally large water user were to locate in Section 30, additional improvements may be necessary to handle the intensive industrial water and wastewater needs. For efficiency and cost effectiveness, a maximum of two public pump stations should be sited to serve all of Section 30.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
6. Power: Clark Public Utilities (CPU)				
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	Electrical infrastructure in NE 119th Avenue and along Highway 503 (NE 117th Ave). CPU has an existing substation located at the southeast corner of the project site, along NE 119th Street. This substation has some existing capacity to serve a portion of the proposed industrial properties development depending on electrical demand. The existing substation has capacity to provide approximately 5.5 MW.	Power lines are visible in aerial mapping on NE 31st Avenue. Substation location appears to be southeast of I-5 at the eastern boundary of Ridgefield (CPU Union Ridge Substation 8427 S 5th St).	Power lines are visible aerial mapping on main roads: SR 502 (NE 10th Avenue, NE 219th Street). North of the Site, there is a CPU Pioneer Switching Station, 23910 NE 11th Ave. South of site is CPU Jones Substation 15325 NE 10th Ave, and west of the site is the CPU Clark Substation, 3414 NW Carty Rd.	Electric power is supplied to the planning area by CPU. Power lines are visible in Google Earth on main roads: NE 1st Street, NE 18th Street, and NE 192nd Avenue. West of the site appears to be CPU Fishers Substation, 16612 SE 1st St, and east of the site is CPU Lacamas Substation, 6100 NW Friberg-Strunk St. BPA maintains a high voltage transmission line that runs in the east-west direction along the north edge of the plan area.
Capacity: High Tech Manufacturing 2 separate sources at 115KV or 20 MW continuous; Light Industrial 5,500 KW peak demand; 3,000,000 KWH/Month, 75% demand factor	Electrical service to the industrial development would require installation of backbone electrical infrastructure to a central area of the project. Additional electrical infrastructure in the form of distribution conduits and conductor and distribution transformers would also be needed. If the project demand is greater, then a new substation would be needed somewhere in the project. This substation could be setup with a redundant transmission source and with redundant transformers to improve system reliability depending on the ultimate users' power needs.	Capacity unknown. With no nearby substation, likely improvements would be greater than for Site 1. Area was considered for inclusion in UGA in 2007 Environmental Impact Statement. The 2007 EIS indicated: *CPU has instituted an aggressive energy conservation policy and provides incentives to customers to encourage their participation in conservation efforts. For this reason, CPU expects to be able to expand the electrical system to serve development, no matter which alternative is selected. Likewise, availability of electricity is not expected to be a limiting factor for new development. (However, industries with special power needs – either total amount or reliability – may prefer to locate near existing substations or in areas where the power grid is more fully developed.)*	Capacity unknown. See Site 2 for information about 2007 EIS Power discussion. Improvements likely similar to Site 1.	Capacity unknown. Improvements likely similar to Site 1.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
Costs: High, Medium, Low	Electrical system upgrades are paid for by the developer. Rates will depend on use. CPU has identified industrial rates.	See Site 1.	See Site 1.	See Site 1.
7. Natural Gas- Proximity, capacity, predictability, continuity, affordability (Northwest Natural)				
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	Adjacent. 6" Main in NE 117th Ave (Hwy 503).	In Northwest Natural service area. Adjacency is unknown.	Same as Site 2.	Private utility providers to the Section 30 plan area include Northwest Natural Gas. Adjacency is unknown.
Capacity • High Tech Manufacturing 2,000 MCF @ 8 PSI • 50,000 therms or 5,000 MCF/Month	NW Natural is planning significant backbone infrastructure reinforcement in this area within the next few years that will exceed the 2,000-5,000 mcf/month demand usage load requirement.	Local capacity unknown. Area was considered for inclusion in UGA in 2007 Environmental Impact Statement. 2007 EIS indicated: *The demand for electricity, natural gas, and other natural resources would increase in Clark County as growth occurs.*	Same as Site 2.	Local capacity unknown.
Costs: High, Medium, Low	To be determined based on particular uses. Northwest Natural will be investing in area.	To be determined based on particular uses	To be determined based on particular uses	To be determined based on particular uses
8. Telecommunications: Century Link QC				
Adjacency • Adjacent to the property (within 100' of property) • Within one mile of the property • Further than one mile of the property	Fiber optic data infrastructure is installed along Highway 503 (NE 117th Avenue), in NE 159th Street, and NE 119th Street. Copper data infrastructure is installed in various locations around the perimeter of the proposed industrial property, see Utility exhibit for locations.	Telephone lines visible similar to power lines – see #6.	Telephone lines visible similar to power lines – see #6.	Telephone lines visible similar to power lines – see #6.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
Site Features				
9. Site Topography • 0-8% Slopes (highly developable) • 8-15% Slopes (moderately developable) • 15%+ Slopes (undesirable)	Whole site less than 8% slope.	64% is less than 8% slope based on soil classification data.	80% is less than 8% slope based on soil classification data.	Western quarry slopes are steep and high. Subarea plan notes: *Site elevation and grade transition between properties should be coordinated to maximize the development potential of Section 30.*
10. Soils • Hydric soils (wetlands) • Infiltration capacity (High, Medium or Low) • Foundation bearing capacity (High, Medium or Low) • Seismic vulnerability (High, Medium or Low) • Moisture content (High, Medium or Low) • Spill containment, (High, Medium or Low)	Well drained to moderately well drained. Mapped hydric soils. Soil limitations to foundations (moderate to severe limitations; severe based on hydric soils). National Earthquake Hazards Reduction Program (NEHRP) predominantly Class D except for peat soils.[1] Liquefaction risk Very Low to Low except for peat soils.	Moderately well drained. Mapped hydric soils. Soil limitations to foundations (moderate to severe limitations; severe along stream corridors). NEHRP Class C. Liquefaction risk Very Low to Low except for stream corridors which are Low to Moderate.	Moderately well drained. Mapped hydric soils. Soil limitations to foundations (moderate to severe limitations; severe along stream corridors). NEHRP Class C and D. Liquefaction risk Very Low to Low except for stream corridors which are Low to Moderate.	Excessively drained. No mapped hydric soils. Slight limitations predominantly. NEHRP Class C. Liquefaction risk Very Low.
11. Presence of sensitive onsite critical areas (e.g. wetlands, floodplains, aquifer recharge areas/wellhead protection areas, fish and wildlife habitat conservation areas, geologic hazards) • Yes • No	See Anchor QEA report February 2015. Small area of liquefaction, NE corner. Oregon white oaks and other habitat in NE corner. About 66 acres of wetlands based on site reconnaissance, less than based on GIS mapping database. Category 2 Critical Aquifer Recharge Areas on both properties. Wellhead Protection Area on west side.	See Appendix A, Anchor QEA June 2015. Riparian habitat conservation areas and biodiversity areas located throughout the site likely are comprised of mature forest and complex understory of sub-canopy. Riparian area good or excellent quality habitat and may support fish and wildlife. Oak Woodland conservation areas to north. Wetlands are likely to be associated with jurisdictional tributaries. The area lies in Category 2 Recharge Area.	Numerous tributaries to Gee Creek exist throughout the site with moderate to good condition riparian areas. Potential unmapped seasonal tributaries. Effective buffers smaller due to existing impervious area. Lies in a Category 2 Recharge Areas. There are some wellhead protection areas to the west and north.	As a former mine site the area is highly altered. There are steep slopes and potential landslide hazard areas. There are Category 1 and 2 Critical Aquifer Recharge Areas. There are public and private wellhead protection areas. A Bonneville Power Administration easement and owned lands with high voltage transmission lines would also present a constraint.

[1] NEHRP Soil Site Classes categorizes the potential for enhanced or amplified ground shaking and range from A (the best - hard rock) to F (the worst - soft clay or swamp muck). See Clark County Code - Chapter 40.430 for more detail.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
12. Environmental Contaminants (prior uses, including Agriculture) • Yes (High, Medium or Low contamination) • No	Use is in agriculture. Use of herbicides.	Use is in agriculture. Likely use of herbicides.	Highway commercial may have current or former sites using hazardous materials. There is an existing gas station subject to state standards for underground storage tanks. Some parcels in agriculture or rural residential use.	Former County landfill in part of Section 30 adjacent to private owned sites. Clay cap installed. Groundwater monitoring occurring.
13. Geometry of the parcel(s) • Rectangular (preferred) • Square (acceptable) • Broken parcels (unacceptable) • Common ownership (may assist parcel geometry to be acceptable or preferred instead of unacceptable) • 400' parcel depths or conglomeration to make these depths (preferred) • 100 acres minimum parcel requirement (contiguous property preferred)[2], [3] • Adjacent parcels allows for future expansion[4]	Total site area is 602 acres. Parcel sizes range from 1 to over 100 acres, but are in two ownerships that each equal over 100 acres. Parcels are over 400 feet in depth. A land use concept shows developable areas of 10-60 acres served by a new circulation plan, regional stormwater system, and wetland protection. As the area would subdivide in the future, many 400 foot deep parcels are possible. Adjacent parcels may be appropriate for similar designations of industrial.	Total site area is 412 acres. Typically rectangular. Parcels range from 5-75 acres in size, with some in common ownership exceeding 100 acres. Most parcels have 400 foot parcel depths. However, as shown on the concept plan, the site is ribonned with streams. The actual developable area is more limited and in chunks that are typically less than 25 acres; one developable area is about 44 acres. Developable areas may cross parcel boundaries of different owners.	Parcels range from 1-75 acres in size and are rectangular and square. Some parcels have 400 foot parcel depths and some less than that (e.g. rural residential lots). Chunks of developable land are 30-47 acres east of I-5 and smaller west of I-5 are smaller. Developable areas may cross parcel boundaries of different owners.	Typically rectangular and with 400 foot depth. Parcels range in size and are around 25 acres in size; some are in common ownership.
14. Ownership • Common ownership of properties (minimal acquisition time) • Multiple ownerships (maximum acquisition time)	While there are multiple parcels, there are two owners.	Multiple owners and moderate parcelization.	Multiple owners with greater parcelization.	Multiple owners and moderate parcelization.

[2] Policy 1.6.2. The Industrial Reserve Area overlay should be applied at certain freeway or arterial interchanges or other sites well served by existing or planned transportation systems, or adjacent to technological or research related uses associated with industrial uses. The IRA designation shall be applied in a limited number locations, in contiguous areas of 100 acres or more.

[3] Policy 9.3.1. Last bullet: New industrial sites that are part of a major industrial land bank shall be required to have a minimum of 75 acres or more and shall not be subdivided less than 50 acres

[4] Once two land banks are designated, no further expansion would be feasible under the Rural Industrial Land Bank provisions of GMA.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
Land Use				
15. Comprehensive Plan and Zoning • Identified for commercial or industrial purposes through designation or overlay, or zoned for such • Agricultural lands of long-term commercial significance / Agricultural-20 zone	Agriculture (Ag) with Industrial Urban Reserve & Railroad Industrial Urban Reserve Overlays. See Appendix B for dedeisgnation analysis.	Ag with Industrial Urban Reserve Overlay. See Appendix B for dedeisgnation analysis.	Rural Commercial, Rural-5, and Ag with Industrial Urban Reserve Overlay. See Appendix B for dedeisgnation analysis.	Industrial Comp. Plan Land Use and Employment Center Mixed Use (ECX) zoning Planned Non-Retail or Mixed Uses are: Office Industrial 100 acres, Industrial 113 acres.
16. Compatibility • Industrial friendly neighborhoods: Adjacent Industrial or commercial zones, limited conflict with residential uses, common adjacent land uses and zoning • Visual quality - Ability to provide a buffer or increase quality of development • Proximity to complementary/ancillary uses • Proximity to employee workforce • Proximity to housing options	Most of surrounding area is designated Agriculture. North of the site east of SR 503 is a small airport. South (and west) of site along SR 503 frontage there is compatible Industrial zoning. Industrial use would be more developed in character than surrounding areas. There is an ability to provide a landscaped buffer – 100 feet assumed in concept plan. See Appendix A for cross-section of the perimeter buffer. Site lies north of a Community Commercial node at NE 119th Street. Close to potential workforce and housing options in Vancouver.	Adjacent to the west Agriculture is designated in unincorporated County. South of the site are the Ridgefield city limits where residential and light industrial uses are planned. Across I-5 to the east Office Park is planned. To the north the County's Agricultural designation is applied. A tribal casino is planned on a tribal trust land though designated Agricultural. Within the site, streams and buffers would separate development. Due to the location of streams, development would likely be closer to roadways with less setbacks possible compared to Site 1.	Site is fully in Industrial Urban Reserve with Rural Commercial, Rural-5, and Agriculture designations. On the periphery Industrial is planned in the Vancouver UGA to the south, and in Ridgefield to the north. To the east and west of the boundaries are additional Agricultural designations. Within the site, Industrial uses could be clustered around a central Rural commercial area which could have design standards; parcelization may make significant buffers on peripheral agriculture and rural residential areas more challenging. The site is between Ridgefield and Vancouver UGAs where there are housing options, and a potential workforce.	To the north, east and west are Urban Low Density Residential designations. To the south is Industrial designated land. A Commercial node is located to the southeast. Close to potential workforce and housing options in Vancouver.
Transportation				
17. Transportation impact fee burden [Fee per trip: County 2013] • High Costs • Medium Costs • Low Cost	Orchards North: $735.00 Rural 1: $365	Rural 2: $79	Rural 1: $365	City Fee – Cascade District: $223 (2015)

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
18. Access to a Regional Roadway Facility • Convenient access (less than 0.5 mile driving distance) to a major road or minor or major arterial roadway facility as designated by the Clark County Arterial Atlas • Convenient access to a designated freight route[5] • Balances site circulation and access needs with regional mobility • Site circulation provides for appropriate separation between freight, employee, and nearby neighborhood access • More than one access point • Site is located in proximity to existing and planned residential areas within the County to ensure convenient access for employees	The study area is bisected by SR 503, a five-lane state highway. Approximately 24,000 to 26,000 vehicles per day were projected to traverse the segment of SR 503 between NE 119th Street and NE 149th Street per data in WSDOT's 2014 Annual Traffic Report. SR 503 is a freight route. The site has more than one access point. SR 503 will be limited in terms of signal location. Development of the Rural Industrial Land Bank Concept has the potential to result in a need for transportation improvements. The SR 503 Circulation Plan and Arterial map unit would require implementation to distribute traffic. The site is located near Vancouver with source of employees. A preliminary capacity assessment at a planning level was conducted and found that with the proposed road network in place, there is sufficient capacity along SR 503 and County-maintained collectors and arterials in the vicinity to accommodate development of the RILB properties for industrial use. See Appendix F.	Abuts I-5 as freight route but does not have direct access. Access would be primarily via north-south NW 31st Avenue corridor linking to I-5 via interchanges at LaCenter Road to the north or Pioneer Street to the south. Very limited connectivity/options. NW 31st Avenue is a rural 2-lane road, appears to be designated R-2 (Rural Major Collector). N 45th Avenue/Pioneer Street roundabout to the south needed to access I-5 is operating close to capacity at Comprehensive Plan buildout and probably could not absorb Site 2 trips without mitigation (intersection is already programmed as a multi-lane roundabout). LaCenter Road interchange proposed to be reconstructed in conjunction with Cowlitz Tribal Development proposal.	SR 502 bi-sects site east-west and connects to I-5. WSDOT is now widening SR 502 to four lanes with a median barrier between I-5 and Battle Ground. Completion projected in 2016. Access to SR 502 likely not allowed except at key signalized intersections. No County Roads shown serving property west of I-5. Potential future NW 219th Street extension shown in yellow west of I-5 – this is a project desired by Ridgefield but unfunded. Virtually no roads to west of site connecting to I-5; this may mean there would be a need to construct 219th west of I-5 to serve site and modify interchange.	A recent study was developed by the CREDC, indicating "Limited access or challenges in obtaining access" for Site 5.[6] Congestion in the study area is on Mill Plain Boulevard and on 164th Avenue per the Section 30 subarea plan. The existing perimeter roads although classified as principal and minor city arterials, are today 2 lane unimproved rural type roadways. A subarea plan was prepared for Section 30 by the City of Vancouver in 2009. The City has a detailed traffic study and a long list of infrastructure needs, many of which the City is working towards (NE 1st Street corridor is currently under conceptual design), future NE 18th Street and NE 192nd Avenue widening to 5-lanes linking SR 14 interchange to the south and new I-205 interchange to the west.

[5] The Washington State Freight and Goods Transportation System (FGTS) Classification System designates roadways and railways based on tonnage. Roadways designated at T-1 or T-2 are considered to be Strategic Freight Corridors. The T-1 designation represents roadways carrying more than 10 million tons per year while the T-2 designation represents roadways carrying 4 million to 10 million tons per year. Per WSDOT, the FGTS is primarily used to establish funding eligibility for Freight Mobility Strategic Investment Board (FMSIB) grants, fulfill federal reporting requirements, support transportation planning process, and plan for pavement needs and upgrades.

[6] The CREDC established a Land for Jobs Committee the 2011 and completed the Clark County Employment Land Inventory. It applied to urban areas.

Feature & Criteria	Site 1	Site 2	Site 3	Site 5
19. Rail Access • Adjacent to site (within 100' of property) • Rail Spur could be extended (1 mile length maximum) • Mainline can be easily accessed (5 mile radius maximum)	Chelatchie Prairie Railroad traverses the western site.	Not available	Not available	Not available
20. Travel time to International Airport • 20 minutes preferred • 40 minutes acceptable • 40 minutes or more undesirable	About 18 minutes without traffic.	About 26 minutes without traffic.	About 22 minutes without traffic.	About 16 minutes without traffic.
Other Criteria				
21. Suitability for existing industrial cluster or targeted cluster consistent with the Clark County Economic Development Plan (commissioned by CREDC in 2011)[7] and compatibility with Light Industrial (IL) zone uses [CCC 40.230.085 Employment Districts (IL, IH, IR, BP)].	Technology and traditional light manufacturing and distribution of goods would likely be possible where allowed by IL zone. Professional services and health services limited by zoning and GMA provisions for the RILB establishment.	Same at Site 1. The presence of streams and buffers may mean smaller industrial uses.	With parcelization likely that light industrial uses would be smaller.	Light industrial and tech/flex, office, retail and residential planned in Section 30 plan. Some not compatible with RILB statute (i.e. residential, more than accessory levels of retail).

[7] http://www.clark.wa.gov/planning/2016update/documents/FINAL_Clark-County-ED-Plan-9_2011.pdf

Mitigation Measures

At a programmatic level the following policy and code standards would reduce potential environmental impacts.

Clark County Rural Industrial Land Bank Draft Development Regulations: Several elements of the draft RILB development standards would minimize natural and built environment impacts associated with light industrial development where the RILB is established:

- Land Uses: Generally, IL zone uses would be allowed with a focus on light manufacturing. Some uses would be restricted either due to potential incompatibilities with onsite industrial uses or abutting rural residential uses.
- Perimeter Setback: A 100-foot perimeter setback is proposed that is greater than the standard setback for the IL zone.
- Landscaping: A dense screen and berming is proposed within the 100-foot perimeter setback.
- Street Standards and Stormwater Quality: Private road standards are included to be more compatible with the concept of the regional stormwater and rural character of the industrial land bank.
- Application of Environmental Quality Measures: The County's critical areas and stormwater regulations would apply to protect ecosystems and water quality. The Southwest Clean Air Agency Regulations would also apply addressing air quality. County roadway concurrency and commute trip reduction requirements would likewise apply to ensure County levels of service are met and roads are improved concurrent with development.
- Infrastructure: Future RILB development would have to demonstrate adequate and available infrastructure and services and would be responsible for the extension of infrastructure as appropriate.

Master Plan Concept: The Site 1 Master Plan Concept would protect critical areas functions and values and accounts for buffers, and develops a stormwater solution that mimics the natural hydrology of the site. The Site 1 Master Plan Concept includes 100-foot perimeter landscaped buffers for compatibility with rural residential areas abutting the site. The Site 1 Master Plan Concept incorporates onsite circulation and a circulation plan that advances the SR 503 Circulation Plan and the County's Arterial Plan. New infrastructure would follow the circulation plan; utility providers have been contacted regarding extension of sewer.

6.0 REFERENCES

City of Vancouver. October 5, 2009. Section 30 Urban Employment Center. Available: http://www.cityofvancouver.us/sites/default/files/fileattachments/community_and_economic_development/page/1415/section30.pdf. Accessed: July 1, 2015.

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David Evans and Associates, Inc. May 4, 2007. FINAL Environmental Impact Statement for the Comprehensive Growth Management Plans of Clark County, Battle Ground, mas, La Center, Ridgefield, Vancouver, Washougal, and Yacolt. Available: http://www.clark.wa.gov/planning/comp_plan/eis.html. Accessed: July 1, 2015.

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Kennedy/Jenks Consultants, March 2013, Clark Regional Wastewater District, Comprehensive General Sewer Plan Amendment.

ADDENDUM PART III. APPENDICES

APPENDIX A: CONCEPTUAL PLANS, INCLUDING MASTER PLAN OBJECTIVES AND PERIMETER SETBACK CROSS SECTIONS

Rural Industrial Land Bank

Preliminary Guiding Principles

Master Plan Goals

A. Develop a vision for the master plan that is compatible with the surrounding land uses and creates long term value for both the community and the industrial users.
B. Develop a master plan that promotes sustainable development by minimizing our environmental impacts, protecting the natural resources and reducing waste.
C. Anticipate changing market and industrial needs and maintain the flexibility required for a variety of light industrial uses.
D. Support the creation of a rural industrial land bank per the criteria set forth in the Growth Management Act (GMA), RCW 36.70A.

Master Plan Objectives

1. Adhere to the requirements set forth in CCC 40.520.075. Create a coordinated and cohesive master plan that can be easily streamlined through the development review and approval process.
2. Ensure the master plan respects and preserves critical areas functions and values, and develop a stormwater solution that mimics the natural hydrology of the site while developing buffers both internally and externally. Incorporate low impact development strategies.
3. Address and evaluate the site criteria for industrial lands against the existing conditions to ensure infrastructure requirements are met and to maximize the land value.
4. Develop a roadway and site infrastructure backbone that allows for phased development based on the market needs.
5. Coordinate infrastructure analysis and planning with public and private agencies so that their long term planning can anticipate the future light industrial development.
6. Ensure that rail access and/or a loop is accommodated as part of the master plan.
7. Promote a master plan that provides a level of predictability for future light industrial based developers and the County through the flexibility of standards and consolidated reviews.

CLARK COUNTY, WASHINGTON

LEGEND

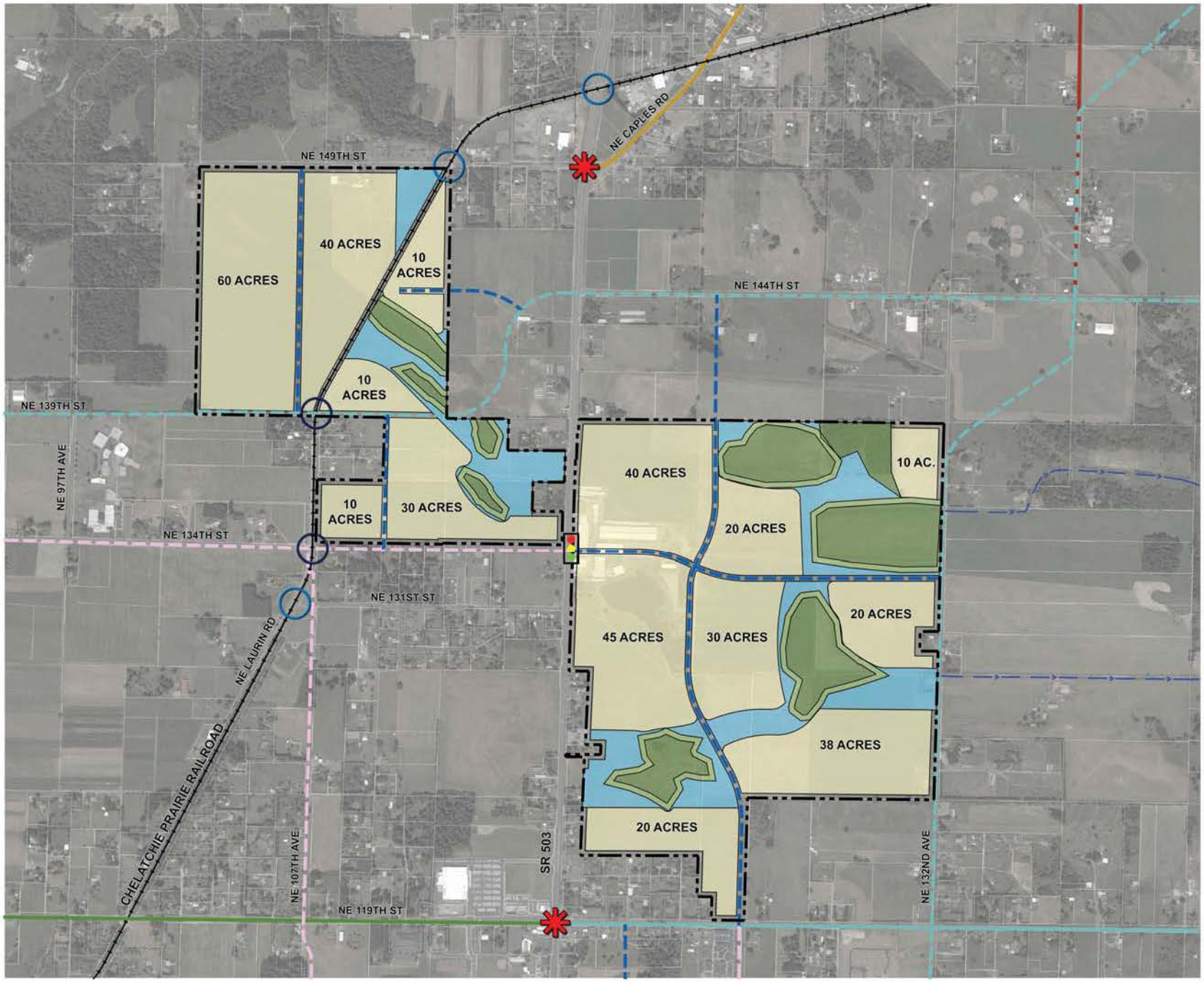
- PROPERTY LINE
- DRAINAGE DITCH
- RAILROAD
- WETLANDS
- WETLAND BUFFER
- WATER QUALITY
- DEVELOPABLE ACREAGE
- PROPOSED TRAFFIC SIGNAL
- VEHICULAR CROSSING WITH EXISTING TRAFFIC SIGNAL
- EXISTING RAILROAD CROSSING
- PROPOSED RAILROAD CROSSING

ARTERIAL CLASSIFICATIONS

- INDUSTRIAL
- COLLECTOR - 2 LANE
- MINOR ARTERIAL - 3 LANE
- MINOR ARTERIAL - 5 LANE W/ BIKE
- RURAL MINOR
- RURAL MAJOR

TOTAL	**600 ACRES**
WETLANDS	66 ACRES
WETLAND BUFFERS	26 ACRES
STORM SYSTEM	71 ACRES
DEVELOPABLE LAND	383 ACRES
ROW & SETBACKS	54 ACRES
-ROADS ROW (60')	
-RAILROAD ROW (60')	
-PERIMETER SETBACK (*100')	

* 100' WHEN THE RILB ABUTS NON RILB LAND TO THE REAR AND SIDE AND 20' ALONG ROAD FRONTAGES



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CLARK COUNTY RURAL INDUSTRIAL LAND BANK

LAND USE ANALYSIS

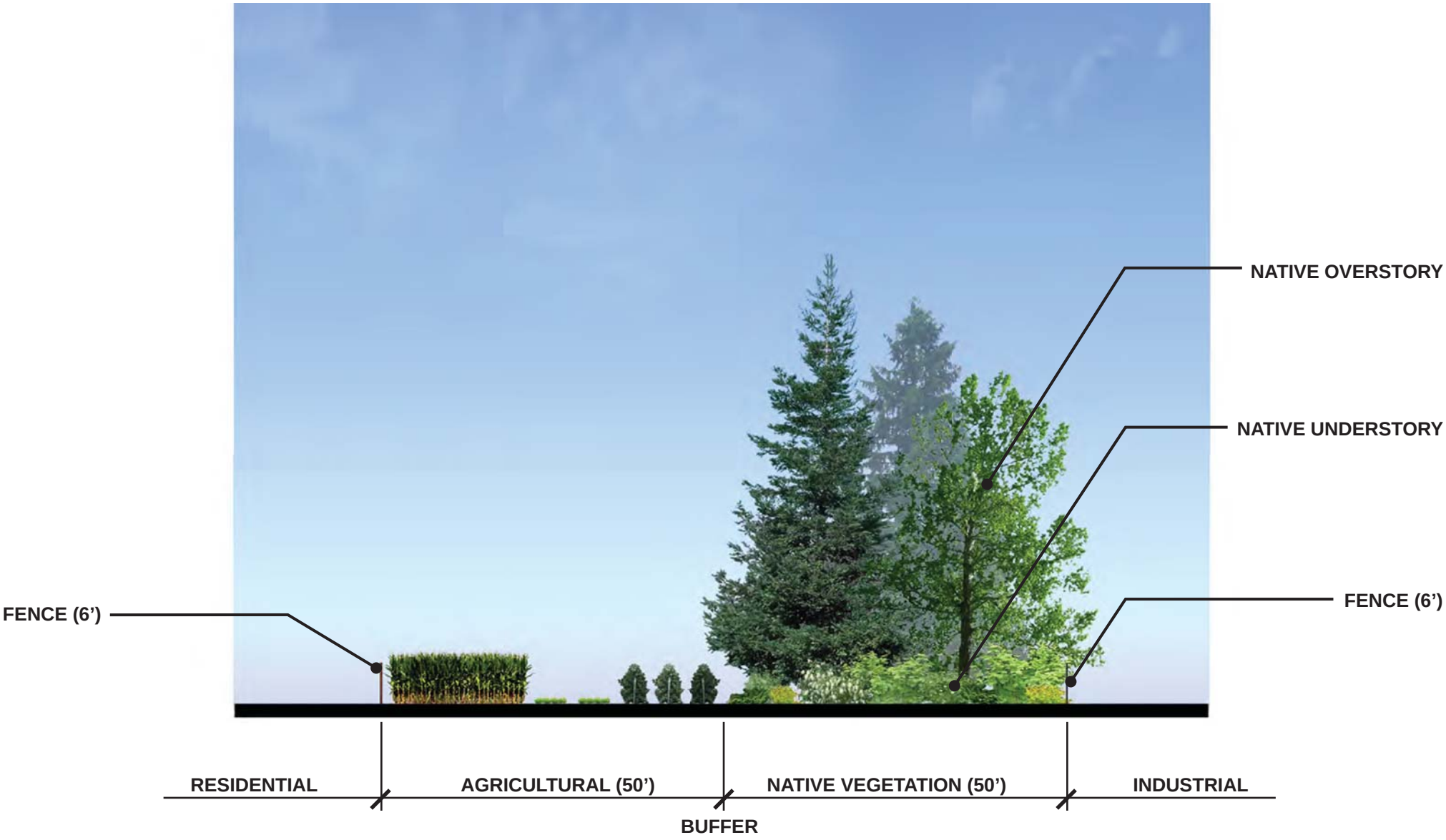
JULY 2015

MacKay Sposito

NATIVE OVERSTORY
NATIVE UNDERSTORY
FENCE (6’)
FENCE (6’)
RESIDENTIAL
NATIVE VEGETATION (100’)
BUFFER
INDUSTRIAL

SECTION A

0
20
40
60


NATIVE OVERSTORY
NATIVE UNDERSTORY
FENCE (6’)
FENCE (6’)
RESIDENTIAL
AGRICULTURAL (50’)
NATIVE VEGETATION (50’)
INDUSTRIAL
BUFFER

SECTION B

0
20
40
60

LEGEND

- Site
- Agricultural Area
- City Limits
- Urban Growth Boundary
- Taxlots
- Contour Lines (100 Ft)
- Contour Lines (10 Ft)
- Watercourse
- Waterbodies
- Floodway
- Floodway Fringe
- 500 Year Flood Area
- Wetlands (NWI)
- Developable Acreage

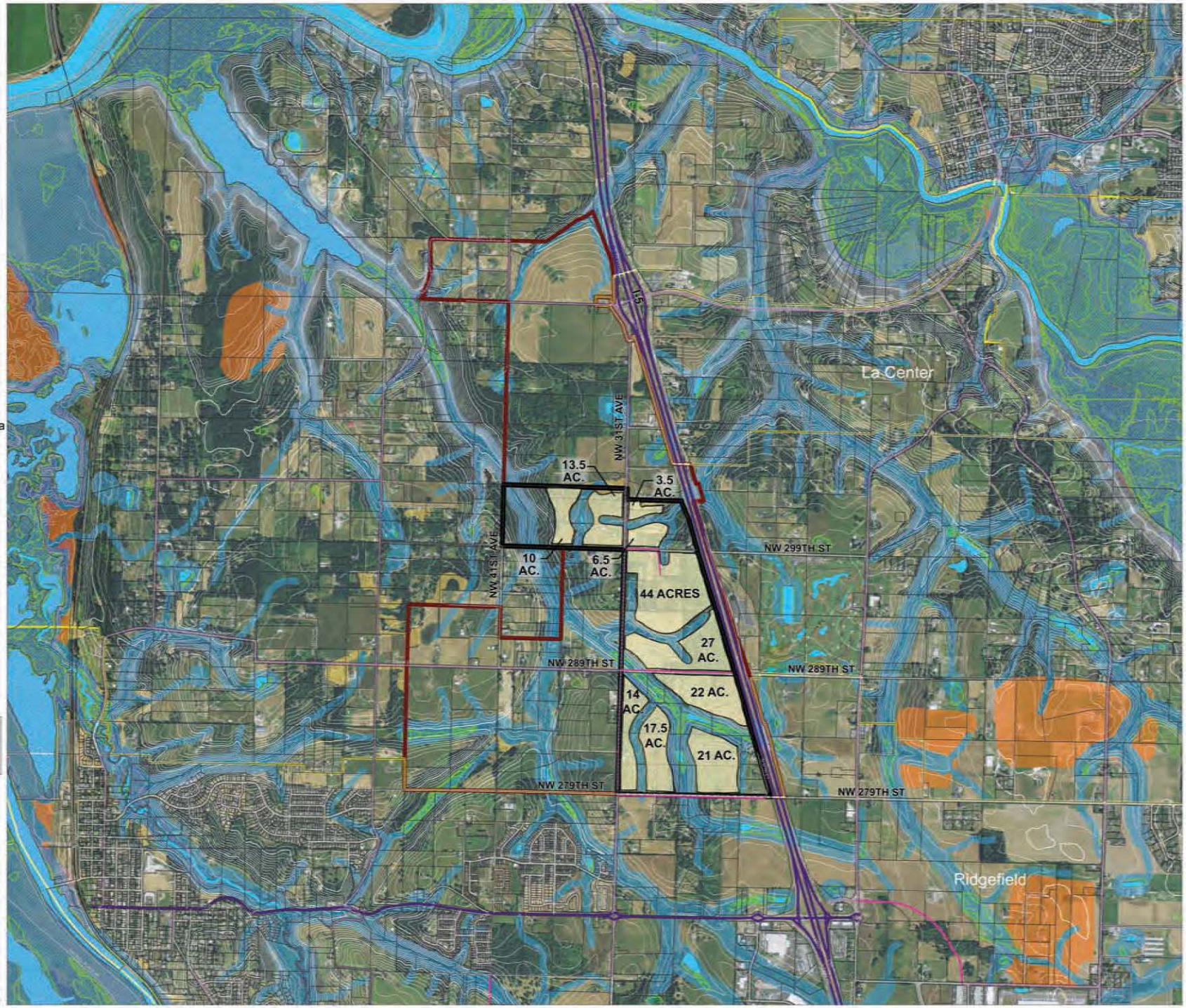
Priority Habitats & Species

- Species
- Non-riparian Habitat Conservation Area
- Riparian Habitat Conservation Area

Arterials

- State Route
- Scenic Highway
- Principal Arterial
- Minor Arterial
- Urban Collector
- Rural Collector
- Proposed
- Unclassified

APPROXIMATED NET DEVELOPABLE ACREAGE 179
(NOT GROSS PARCEL SIZE)



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CLARK COUNTY RURAL INDUSTRIAL LAND BANK
Clark County: Critical Areas, Topography, and Arterials (Site 2)
June 2015

SITE 2 -

LEGEND

- Site
- Agricultural Area
- City Limits
- Urban Growth Boundary
- Taxlots
- Contour Lines (100 Ft)
- Contour Lines (10 Ft)
- Watercourse
- Waterbodies
- Floodway
- Floodway Fringe
- 500 Year Flood Area
- Wetlands (NWI)
- Developable Acreage
- Commercial Planning Zone

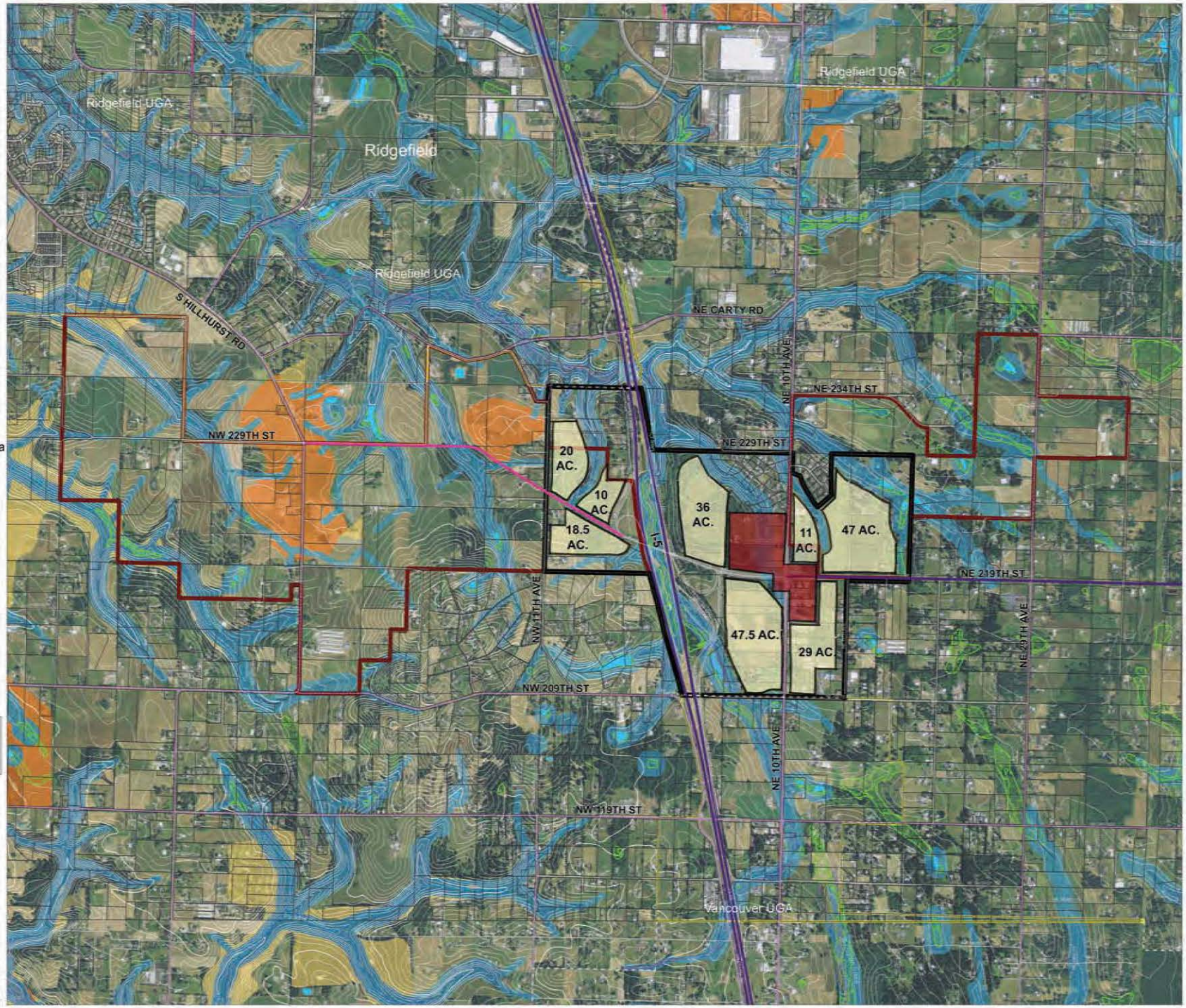
Priority Habitats & Species

- Species
- Non-riparian Habitat Conservation Area
- Riparian Habitat Conservation Area

Arterials

- State Route
- Scenic Highway
- Principal Arterial
- Minor Arterial
- Urban Collector
- Rural Collector
- Proposed
- Unclassified

APPROXIMATED NET DEVELOPABLE ACREAGE 219
(NOT GROSS PARCEL SIZE)



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CLARK COUNTY RURAL INDUSTRIAL LAND BANK
Clark County: Critical Areas, Topography, and Arterials (Site 3)
June 2015

SITE 3 -

LEGEND

- Site
- Agricultural Area
- City Limits
- Urban Growth Boundary
- Taxlots
- Contour Lines (100 Ft)
- Contour Lines (10 Ft)
- Watercourse
- Waterbodies
- Floodway
- Floodway Fringe
- 500 Year Flood Area
- Wetlands (NWI)
- Developable Acreage

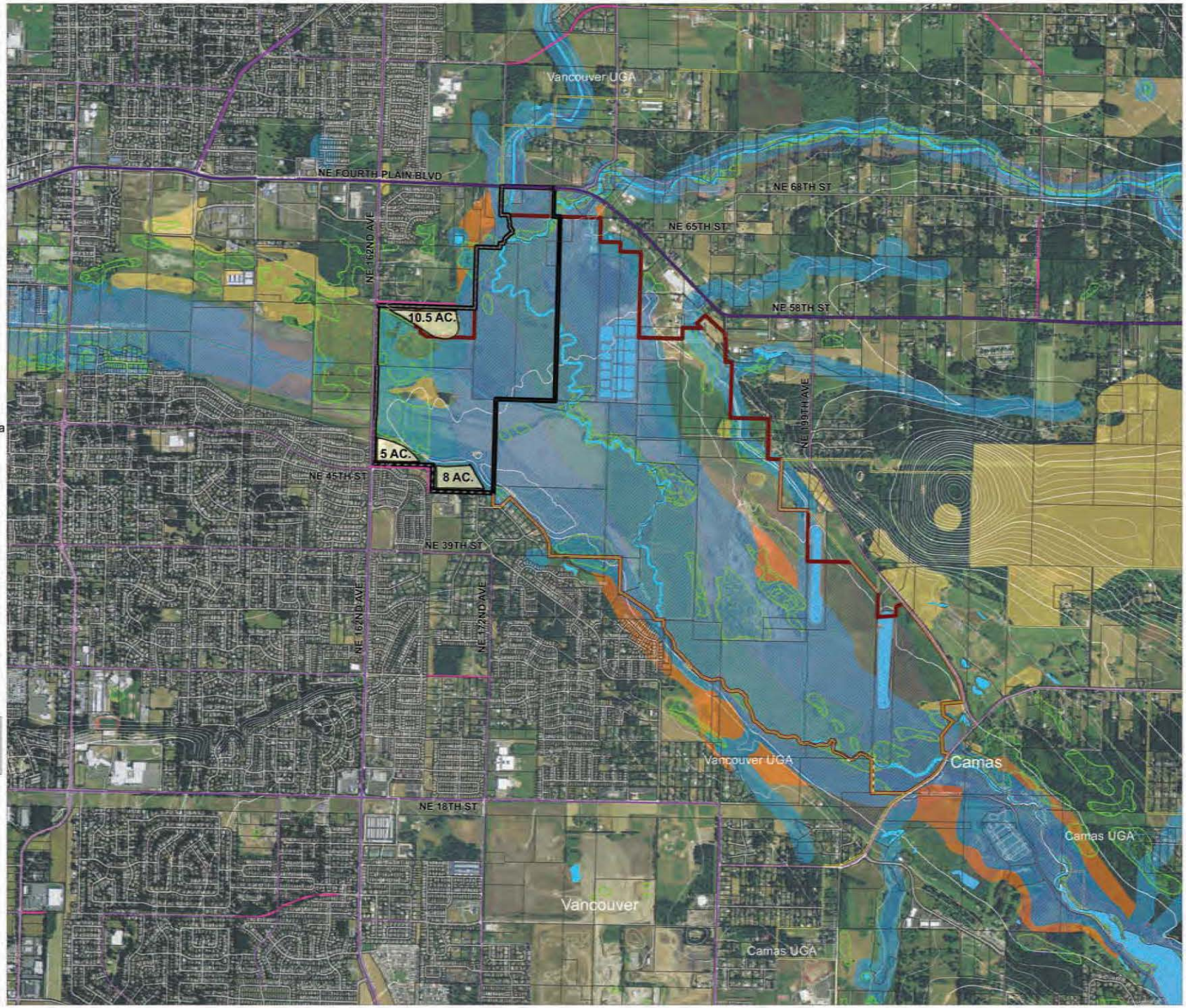
Priority Habitats & Species

- Species
- Non-riparian Habitat Conservation Area
- Riparian Habitat Conservation Area

Arterials

- State Route
- Scenic Highway
- Principal Arterial
- Minor Arterial
- Urban Collector
- Rural Collector
- Proposed
- Unclassified

APPROXIMATED NET DEVELOPABLE ACREAGE 23.5 (NOT GROSS PARCEL SIZE)



CLARK COUNTY RURAL INDUSTRIAL LAND BANK
Clark County: Critical Areas, Topography, and Arterials (Site 4)
June 2015

SITE 4 -

FIGURE 3. Overall Concept Map

APPENDIX B: AGRICULTURAL LANDS ANALYSIS

AGRICULTURAL LANDS ANALYSIS

Rural Industrial Land Bank Candidate Alternative Sites

Prepared by:

BERK Consulting, in conjunction with
Cairncross & Hempelmann

Prepared for:

Clark County Community Planning

March 2015 / Revised September 2015

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Appendix B. Site 1 (Docket) Critical Areas Report, Anchor QEA

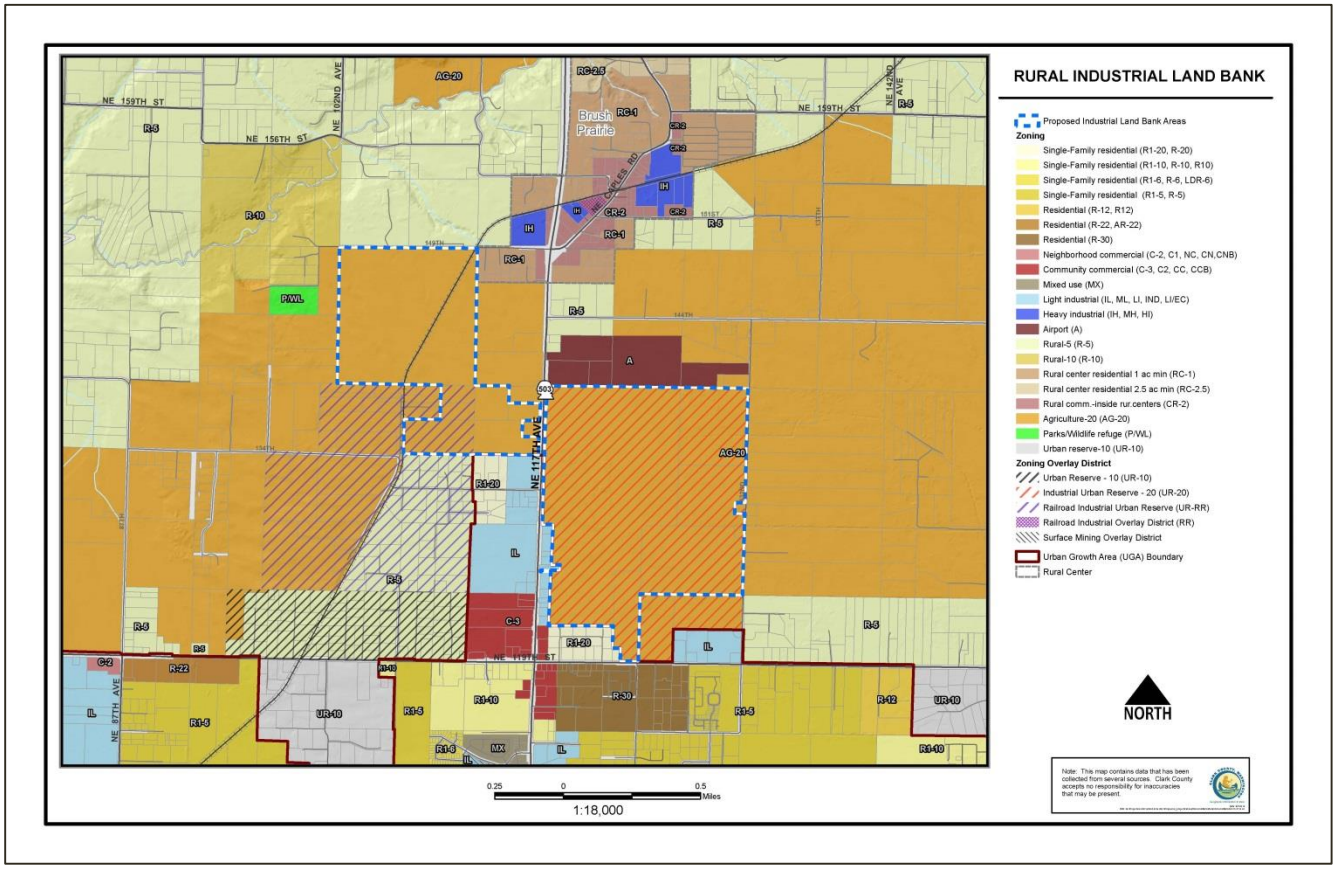
1.0 INTRODUCTION AND EXECUTIVE SUMMARY

In 1996, the Growth Management Act (GMA), RCW 36.70A, was amended with provisions to allow major industrial developments to be sited outside of urban growth areas (UGAs). RCW 36.70A.367 allows counties to establish up to two rural industrial land banks (RILBs) with the intent that they develop as industrial properties. In 2014, Clark County received a docket application to establish an RILB on properties that straddle SR 503 north of the Vancouver UGA:

- Ackerland property west of 117th Avenue, 223.72 acres.
- Lagler property east of 117th Avenue, 378.71 acres.

Exhibit 1 below shows these properties. Presently the zoning for both properties is Agriculture (AG-20). The requested zoning is Light Industrial (IL); the IL zone uses are listed in Clark County Code (CCC) Section 40.230.085.

Exhibit 1. Docket Application – RILB: Ackerland and Lagler Properties



Source: Clark County GIS August 2014

The Clark County Comprehensive Plan identifies the two properties in Exhibit 1 as agricultural lands of long-term commercial significance. Portions of the properties are identified as Railroad Industrial Reserve Overlay or Industrial Reserve Overlay, though implementing zoning has not been applied.

The sites were studied for a variety of agricultural and employment uses, including urban industrial uses, in a 2007 Environmental Impact Statement (EIS). Prior Comprehensive Plan amendments included the properties in the Vancouver UGA, but the expansions were removed after a Growth Management Hearings Board determination and compliance order requiring the County to do so. The sites have not previously been evaluated as part of potential RILB.

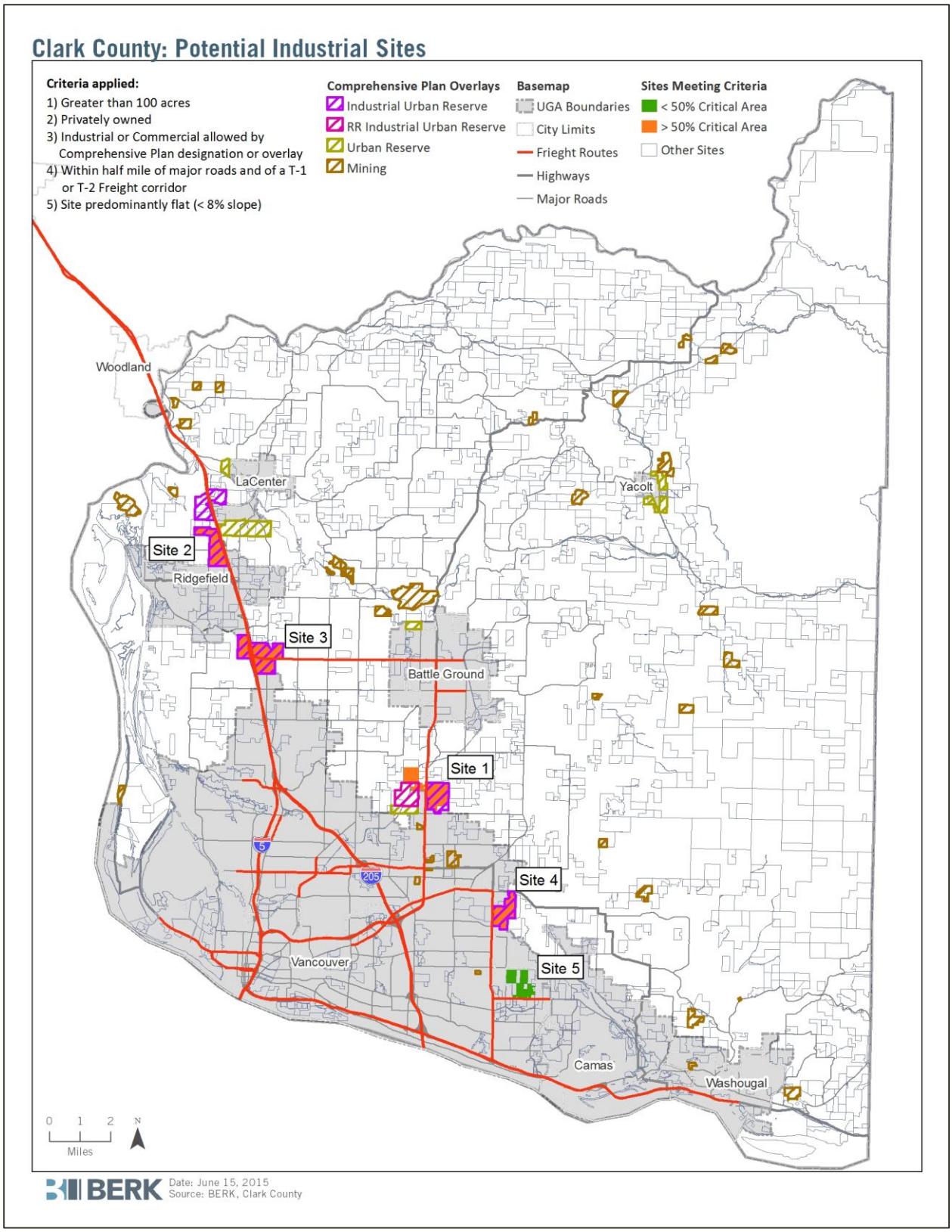
Key steps in the RILB process include:

- Identifying locations suited to major industrial use,
- Identifying the maximum size of the bank area,
- Developing a programmatic environmental review with an inventory of developable land and alternative sites, and
- Developing comprehensive plan amendments and development regulations for the bank and future specific major industrial developments.

An important step in the RILB process is an inventory of developable land and analysis of the availability of alternative sites within UGAs and the long-term annexation feasibility of sites outside of UGAs (RCW 37.70A.367(2). As a result of a draft inventory applying criteria of what makes a good industrial site (available under separate cover; BERK et al. September 2015), five sites have been identified as candidate alternative sites for further evaluation, including the docket site. See Exhibit 2. Sites 1 through 4 have been designated as having long-term significance for commercial agriculture. Site 5 does not contain lands designated as long-term significance for agriculture.

As part of identifying and designating sites suitable for a RILB, the County must consider appropriate zoning, and must "mitigate adverse impacts on designated agricultural lands, forest lands, and mineral resource lands." (RCW 36.70a.367(3)(j)). This document evaluates candidate alternative sites in terms of the degree to which the lands satisfy the agricultural land classification criteria in WAC 365-190-050. It further considers the area surrounding candidate sites in relation to the minimum criteria to classify agricultural land.

Exhibit 2. Rural Industrial Land Bank, Candidate Sites Selected for Further Evaluation



1.1 Document Contents

This document is arranged to present technical maps and data, an analysis of the criteria, and summary conclusions for each site that contains designated agricultural land, as follows:

1. Introduction and Executive Summary
   1.1. Document Contents
   1.2. Executive Summary
2. Site 1 and Areawide Study Area
   2.1. Study Area Description
   2.2. Maps Reviewed
   2.3. Agricultural Land Classification Criteria Analysis
   2.4. Summary and Conclusions
3. Site 2 and Areawide Study Area
   3.1. Study Area Description
   3.2. Maps Reviewed
   3.3. Agricultural Land Classification Criteria Analysis
   3.4. Summary and Conclusions
4. Site 3 and Areawide Study Area
   4.1. Study Area Description
   4.2. Maps Reviewed
   4.3. Agricultural Land Classification Criteria Analysis
   4.4. Summary and Conclusions
5. Site 4 and Areawide Study Area
   5.1. Study Area Description
   5.2. Maps Reviewed
   5.3. Agricultural Land Classification Criteria Analysis
   5.4. Summary and Conclusions

1.2 Executive Summary

All of the candidate sites with designated agricultural land are evaluated in Sections 2 through 5 of this study. A summary of the analysis across each site appears in the following Exhibit 3. Results show:

- The sites are largely in agricultural use, with Site 3 itself having more rural residential and non-agricultural uses.
- Site 1 has the greatest amount of prime soils but other sites with a majority of prime soils including prime soils if drained include Sites 3 and 4. All sites have variable soil capability classes with higher class soils in Sites 1 and 3.
- Parcel sizes vary among all Sites from 0.26 to over 100 acres in size, but are larger in Sites 1 and 4 and moderate in Sites 2 and 3. All sites abut Urban Growth Areas (UGAs). Sites 1 and 4 in particular have greater proximity to urban levels of development and urban infrastructure including major roads, freight routes, and existing sewer and water lines. Site 3 is traversed by major freight routes carrying urban traffic and has water service; sewer service to abutting UGA lands is under planning and construction. Site 2 has less urban services in the area, but sewer service is planned in the Ridgefield UGA.
- Lands in agricultural use tend to be in current use taxation status and are taxed at below market value. All sites are in proximity to market areas – the nearby cities.

- The agricultural activities are taking place in the context of declining large and mid-sized farms and general increase in urban oriented, high product value farms.
  - Dairy farms have greatly decreased in the County. Challenges to maintaining or expanding operations include expensive land values, management of manure and water quality standards, and other issues.
  - There are farm operations that sell products regionally (Site 1 selling to Tillamook Creamery and Site 4 selling milk products in Pacific Northwest). Others may sell some products locally (e.g. Site 2 tree farm and Site 3 areawide includes a farm selling direct to locals).
  - There is no known interdependence among the agricultural businesses in the broader areawide study areas.

Exhibit 3. Comparison of Sites in relation to Agricultural (Ag) Designation Criteria

WAC 365-190-050 Criteria	Site 1	Site 2	Site 3	Site 4
Gross parcel acres	602	412	764	366
Present land use designations	Agriculture (Ag) with Industrial Urban Reserve & Railroad Industrial Urban Reserve Overlays	Ag with Industrial Urban Reserve Overlay	Rural Commercial, Rural-5, and Ag with Industrial Urban Reserve Overlay	Ag and Rural-5 with Industrial Urban Reserve Overlay
WAC 365-190-050 Criteria				
Areawide analysis conducted	3,196 acre Ag designation area	1,319 acre Ag designation area	2,109 acre Ag designation area	1,533 acre Ag designation area
Regulations conserving agriculture adopted	Regulations allow agriculture in all zones and conserve Ag designated lands.			
Not already characterized by urban growth	Parcels are in dairy, other agricultural or rural residential use.	Parcels are in agricultural or rural residential use.	Parcels are in agricultural or rural residential use.	Parcels are in dairy, other agricultural or rural residential use.
Used or capable of being used for ag. production	Used for ag: dairy and hay/silage.	In use for ag per current use records.	In use for ag per current use records.	Used for ag: dairy and other ag.
Land-capability classification	Contains Class 1, 2, and 3 soils with some Class 6 soils. Mostly Classes 1 and 3.	Contains Classes 3, 4, and 6. Mostly Class 3.	Contains Classes 1, 2, 3, 4 and 6 soils. Mostly Class 3.	Contains Class 1, 2, 3 and 6 soils; mostly Class 6.
Classification of prime and unique farmland soils	About 76% of soils are considered prime farmland, and 23% is prime farmland if drained (site is drained); total 99% prime soils.	About 34% of soils are considered prime farmland, and 11% is prime farmland if drained. Drainage unknown, but likely. Total 45% prime soils.	About 55% of soils are considered prime farmland, and 4% are prime farmland if drained. Drainage unknown, but likely. Total 59% prime.	About 30% of soils are considered prime farmland and 29% is considered prime farmland if drained. Site is in a drainage district. If drained, prime soils total 59%.

WAC 365-190-050 Criteria	Site 1	Site 2	Site 3	Site 4
Availability of public facilities, including roads used in transporting agricultural products	SR 503 splits the two properties, is a freight route, and carries urban traffic. Water lines run along SR 503 and NE 119th and NE 149h Street and serve the properties. Sewer is located in the UGA south of the sites around NE 119th Street. A school and an airport lie adjacent to the site.	I-5 is a freight route, and carries urban traffic. NW 289th Street and NW 31st Avenue are Rural Major Collectors. There are no water or sewer lines within the site area or nearby. Future service is planned to the south in the Ridgefield UGA.	I-5 is a freight route, and carries urban traffic. SR 502 also carries urban volumes and is a state designated freight route. Traffic on SR 502 is expected to double in the next 20 years. Some water lines traverse the area. Sewer lines are planned through the study area to connect the Ridgefield UGA to the Salmon Creek Wastewater System.	SR 500 is on the northern border of the site and NE 162nd is a state designated freight route. Sewer and water lines are available on NE 162nd Street.
Tax status, including current use tax assessment	All of the subject property is in the agricultural current use taxation program.	A majority of the property is in the program, with few exceptions in the northwest and southeast corners.	Parcels with AG-20 zoning are in the program as well as Rural zoned property in ag use. Many rural-zoned properties are not in the program.	A majority of the subject property is in the current use taxation program. Some rural parcels with homes are not included.
Availability of public services	Served by drainage district, school district, fire districts, and sheriff. Small private airport abuts.	Served by school district, fire district, and sheriff.	Served by school district, fire district, and sheriff.	Served by drainage district, school district, fire district, and sheriff.
Relationship or proximity to urban growth areas	The site abuts the Vancouver UGA on the south. The Battle Ground UGA is nearby to the north.	The site abuts the north boundary of the Ridgefield UGA and is close to the west boundary of the LaCenter UGA.	The site abuts the south boundary of the Ridgefield UGA and abuts the north boundary of the Vancouver UGA.	The site is adjacent to the Vancouver UGA on its western and southern borders. (The areawide study area abuts Camas UGA.)
Predominant parcel size	The property contains parcels of just less than 0.26 acres to more than 100 acres.	The property contains parcels of 0.26 to 75 acres.	The site contains parcels of less than 0.26 to 75 acres. The majority of parcels range in size from 0.26 to 20 acres.	The property contains parcels of 1 to 100 acres or greater.
Land use settlement patterns and their compatibility with agricultural practices	The property is generally open in character, except for the dairy buildings and some homes. UGA territory is to the south and commercial and residential uses have been developed.	The property is generally open in character, except for the agricultural related buildings and some homes. UGA territory is to the south and is residential.	The property is generally open in character, but there is development along major roads (e.g. NE 10th Ave). UGA territory is to the south and northwest.	The property is generally open in character, except for the agricultural related buildings at the southwest corner of the site, and homes. UGA territory is to the south, west and northwest.

WAC 365-190-050 Criteria	Site 1	Site 2	Site 3	Site 4
Intensity of nearby land uses	Residential density south of NE 119th Street ranges from 5-10 units /acre, 10-20 units /acre, and 20+ units /acre.	Densities within the Ridgefield UGA are generally 5-10 units per acre.	Densities in UGAs near the site are: 5-10 units per acre, 10-20 units per acre and some 1-5 units per acre.	Urban densities in adjacent UGA lands are typically 5-10 units per acre. Some mixed use zoning abuts to the north.
History of land development permits nearby	There have been a series of permit applications south of the sites along NE 119th Street and north of NE 149th Street.	Most permits are mapped in the Ridgefield and LaCenter UGAs.	There have been permits within and surrounding Site 3; with a concentration of permits in the UGAs.	Most permit activity has occurred in areas abutting and near to the site in the Vancouver UGA.
Land values under alternative uses	Land values for non-agricultural uses of the Lagler and Ackerland properties are significantly greater than for agricultural uses. With the land discount included, the total value of the dairy buildings and land is 39% of its market value.	Land that is in current use assessment is taxed at below its market value typically at less than half.	Properties under current use assessment in the study area are reduced compared to taxable value. Depending on if there are structures, the taxable value is 16%-66% of the market value.	The dairy is in current use taxation. Some land is not taxed and other land is taxed at just over 10% of its market value.
Proximity to markets	In close proximity to Vancouver UGA market.	Adjacent to Ridgefield UGA.	Abuts Vancouver and Ridgefield UGAs. West of Battleground UGA.	Adjacent to the Vancouver UGA. (The areawide study area abuts Camas UGA.)
May consider food security, local food, artisans	In Clark County the number of small farms has been increasing over time, and represents more intensive, value-added, urban-oriented farming. The Clark County Food System Council addresses food security in the County and is promoting the use of locally grown food. The Lagler dairy does not sell its product locally.	See Site 1 analysis. Federal mapping indicates land is in grass/pasture, deciduous forest, and cranberries. State information shows a predominance of hay/silage. The Washington State University (WSU) Farm Locator indicates there is a tree farm in the study area: Finn Family Tree Farm.	See Site 1 analysis. The area is in hay/silage predominantly according to federal and state information. It is not known if this site provides products to the local market. To the east in the broader study area there is a farm selling direct to consumers.	See Site 1 analysis. Also, the property is owned by Andersen Dairy, based in Battle Ground. Their milk and other dairy products are sold throughout the Pacific Northwest.

WAC 365-190-050 Criteria	Site 1	Site 2	Site 3	Site 4
Designating agricultural resource lands sufficient to maintain and enhance the economic viability of the ag. industry in County over long-term	All sites are in agricultural uses to some degree. Most of the land acres appear to be in hay/silage but two dairies are located in Sites 1 and 4. There are also tree farms and vegetable and wheat farms within the sites or broader areawide study areas. Rural lands study findings show the number of farms has been increasing (e.g. 2002-2007) but has been experiencing a decline in average size and are becoming more urban oriented. Since 2007 there was a slight decline in the total number of farms in the 2012 Census of Agriculture. Based on the Rural Lands Study[1], there has been a "decline in the number of commercial and mid-sized farms in Clark County between 1997 and 2007, and presumably through 2012 (relayed anecdotally from key informants)." The long-term outlook for larger farms in Clark County is in transition due to water rights, labor, and access farm supportive services. The value of milk production from cows in 2012 is $14.5 million out of the total value of all agricultural products at $50.9 million. Presently, milk production is a relatively large share in the total value of agricultural products, though the long-term trends of large and mid-size farms is one of decline. The number of dairies in the County has steadily decreased in the county according to the US Census of Agriculture; though the number of dairies was at 25 in both the 2002 and 2007 Census reports, dairies have since been reduced to 9 as of 2012. Reasons for the decline in dairies may include: The cost of running a smaller dairy has increased, as have regulatory requirements such as water quality. Lower land prices, lower rainfall, and the efficiencies gained with a larger operation and management have led many dairies to move from Western Washington to Eastern Washington. Even if there is current use taxation, the cost to purchase the land is based on market value. This is especially true for a dairy farm which requires a larger land base to handle nutrient application from the manure generated. Waste management costs on the west (wet) side of the mountains increase with the relatively plentiful rain (increases the material needed to spread; limits times of year material can be spread due to environmental concerns, etc.). Hay and forage land represents the top cropland in acres in the County, 17,541 acres of 74,758 acres in farms. The number of farms with crops and hay shows an increase between 2002 and 2007 and a more recent decline in 2012.			
May classify ag. lands of local importance	The County has not designated agricultural land of local importance. This is an optional policy choice.			

Source: BERK Consulting 2015

[1] BERK. 2012. Clark County Rural Lands Study. Available: http://www.clark.wa.gov/planning/rurallands/index.html.

2.0 SITE 1 AND AREAWIDE STUDY AREA

2.1 Study Area Description

This evaluation addresses the following study areas – the Docket Application Site 1 and an area similarly designated and zoned surrounding Site 1. See Exhibit 4.

Exhibit 4. Site 1 and Areawide Study Area Description

Description	Comments
Site 1: Docket Application - Ackerland and Lagler Site	Site 1 includes two properties that straddle SR 503 north of the Vancouver UGA: • Ackerland property west of 117th Avenue, 223.72 acres. • Lagler property east of 117th Avenue, 378.71 acres. See Exhibit 1 and the map series in Section 2.2.
Areawide Analysis: AG-20 Zoning in Vicinity of Site 1	The areawide study area includes Agriculture (Ag) designated land between the UGAs of Battleground and Vancouver, including areas abutting Site 1 and generally continuing north, east, south, and west until another non-Ag designation abuts, or until the contiguous Ag pattern changes (such as to the east where the Ag designated area is split by Rural designations or the property takes access from other roads). See Section 2.2 for a map series.

2.2 Maps Reviewed

A series of maps were reviewed as described in Exhibit 5 in order to conduct the Site 1 and Areawide analysis of agricultural land designation criteria in Section 2.3.

Exhibit 5. Maps Reviewed: Site 1 and Areawide Study Area

Maps	Comments
Comprehensive Plan	Site 1: Eastern property of 378.71 acres fully in Industrial Urban Reserve with Agriculture designation. About 30 acres of western 234 acres are in the Railroad Industrial Urban Reserve. Thus, most of western property is outside of the overlays. All property is designated Agriculture. See Exhibit 6. Areawide: Agriculture. Area south of Ackerland property has Agriculture with Railroad Industrial Urban Reserve Overlay. See Exhibit 6.
Zoning	Site 1: Agriculture-20 (AG-20). See Exhibit 6 and Exhibit 8. Areawide: AG-20, small portion of Airport. See Exhibit 6 and Exhibit 8.
Soils	Site 1: Hillsboro silt loam, Dollar loam, McBee silt loam, and Hillsboro loam make up most of the study area soils. Hillsboro silt loam, Hillsboro loam, and Dollar loam are considered prime farmland soils, but McBee silt loam is considered prime farmland if drained. Classes of soil include 1, 2, 3 and 6. See Exhibit 11 and soil information in Appendix A. Areawide: Soil types are similar to Site 1. Soil capability classifications show a mix of Class 1-4 and 6-7 types. Classes 1 and 2 are more prevalent to the west of SR 503 and a greater mix of soil capability classes is found east of SR 503. However, most of the area is considered prime farmland or prime farmland if drained, according to the Natural Resource Conservation Service (NRCS). See Exhibit 11 and Appendix A.
Topography	Site 1: Generally flat 0-5% per soils survey; maximum slope 8-15% per SEPA checklist submitted with docket application. See Appendix A. Areawide: Slopes are generally 0-5% per NRCS soil data. See Appendix A.

Maps	Comments
Aerial photography	Site 1: Primary structures in study area are dairy buildings east of SR 503 on Lagler property. See Exhibit 6. There are manure treatment lagoons on the Lagler property, and ditches on both properties. Areawide: Agricultural structures and agricultural land extend through most of the study area. There are residential uses on the agricultural properties and pockets of residential neighborhoods such as to the south (outside of the study area) of the Ackerland Site and to the east, and south of the Lagler site (outside of the study area). Southwest of the Ackerland site in the study area is Glennwood Heights Elementary School and Laurin Middle School. Southeast of the Lagler site in the study area is Hartwood Golf Course.
Current Use	Site 1: Agriculture with current use taxation. See Exhibit 8. Areawide: Nearly all parcels are in the current use taxation program. See Exhibit 8. See above for land uses in the study area.
Parcel size	Site 1: Variable. One parcel on the east is 221 acres, one is 0.26 acre and others are 20-75 acres. Parcels on west range from 5 to 156 acres. See Exhibit 7. Areawide: The Ackerland and Lagler properties are the largest properties in the study area. Other sites are 0.26 - 1, 5-20 acres and 20-75 acres in size. See Exhibit 7.
Infrastructure: Roads, Sewer, Water	Site 1: SR 503 splits subject property. Existing and future arterial classes serve properties. Water lines run along SR 503 and NE 119thand NE 149h Street and serve the properties. Sewer is located in the UGA south of the sites around NE 119th Street. See Exhibit 9. Areawide: Water lines traverse the area. Sewer lines are closest located south of the area in the Vancouver UGA and along SR 503 in proximity to the Lagler Property. SR 503 serves as an arterial and freight route. See Exhibit 9.
Floodplains	Not applicable
Wetlands	Site 1: Wetlands are mapped, as are hydric soils. See Exhibit 10. Also a critical areas report (Anchor QEA February 2015) indicates there are wetlands likely Category III that are less extensive than the mapped wetlands.[2] See Appendix B. Areawide: Wetlands are mapped throughout the study area, particularly to the east of SR 503. See Exhibit 10.
Streams	Site 1: There are no onsite streams. Site 1 is connected or adjacent to tributaries to Salmon Creek near the intersection of SR 503 and the railroad tracks on the northern portion of the site. (Anchor QEA February 2015) See Appendix B. Areawide: Streams are found in the north and east of the study area. See Exhibit 10.
Aquifer Recharge	Site 1: Extensive Category 2, Limited Category 1. See Exhibit 13. Areawide: Same as for Site 1, See Exhibit 13.

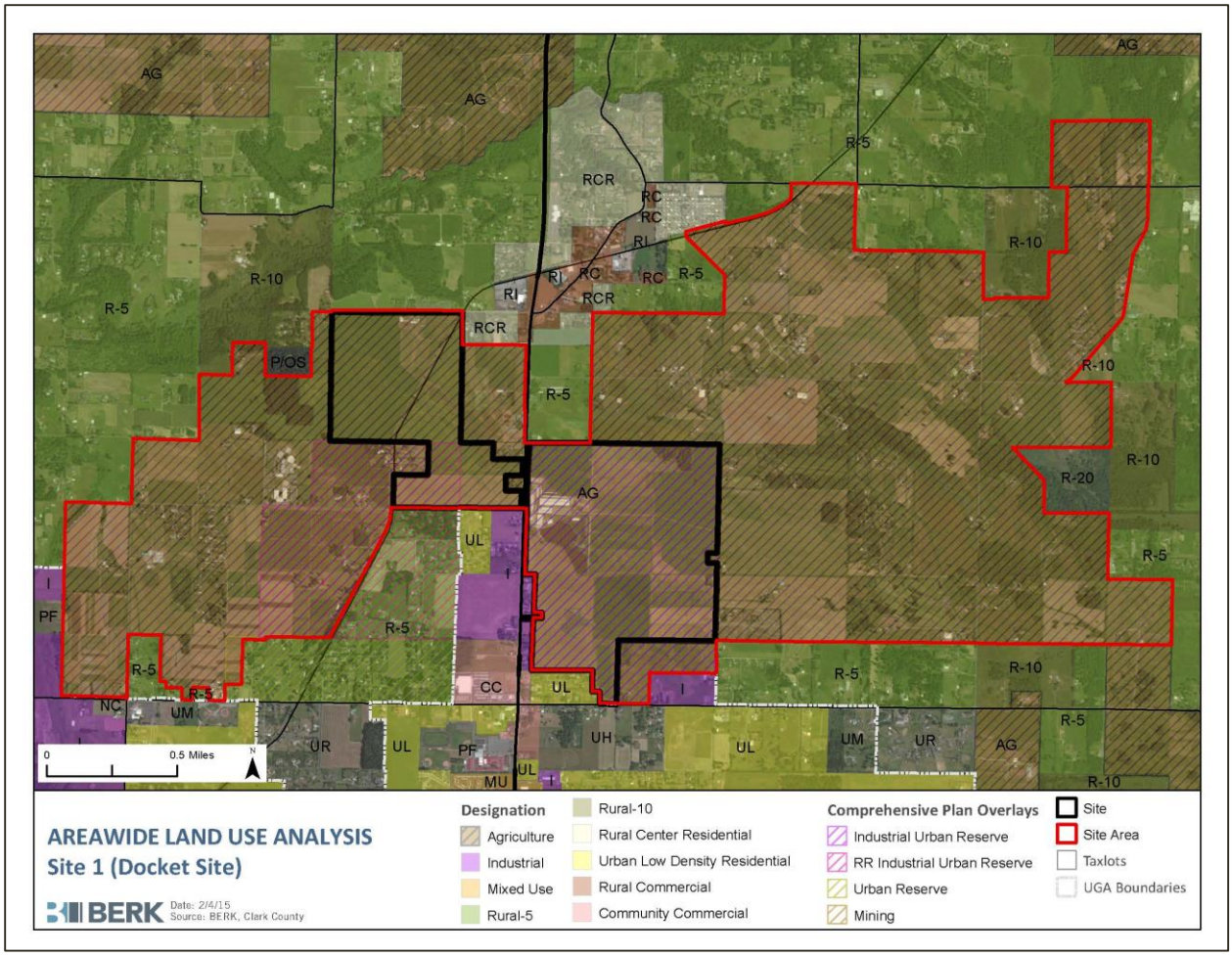
[2] Based on the Anchor QEA reconnaissance and research (February 2015), due to the intensity of land management at Site 1, wetlands as mapped in the NWI and County dataset appeared significantly different than conditions encountered in the field, where the distribution of potential wetland areas appeared much more limited. See Appendix B.

Maps	Comments
Geologic Hazards	Site 1: No presence of landslide or erosion hazards; very low to low liquefaction hazards, except in peat soils. See Appendix B. Areawide: Same as Site 1.

Site 1 and Areawide Maps

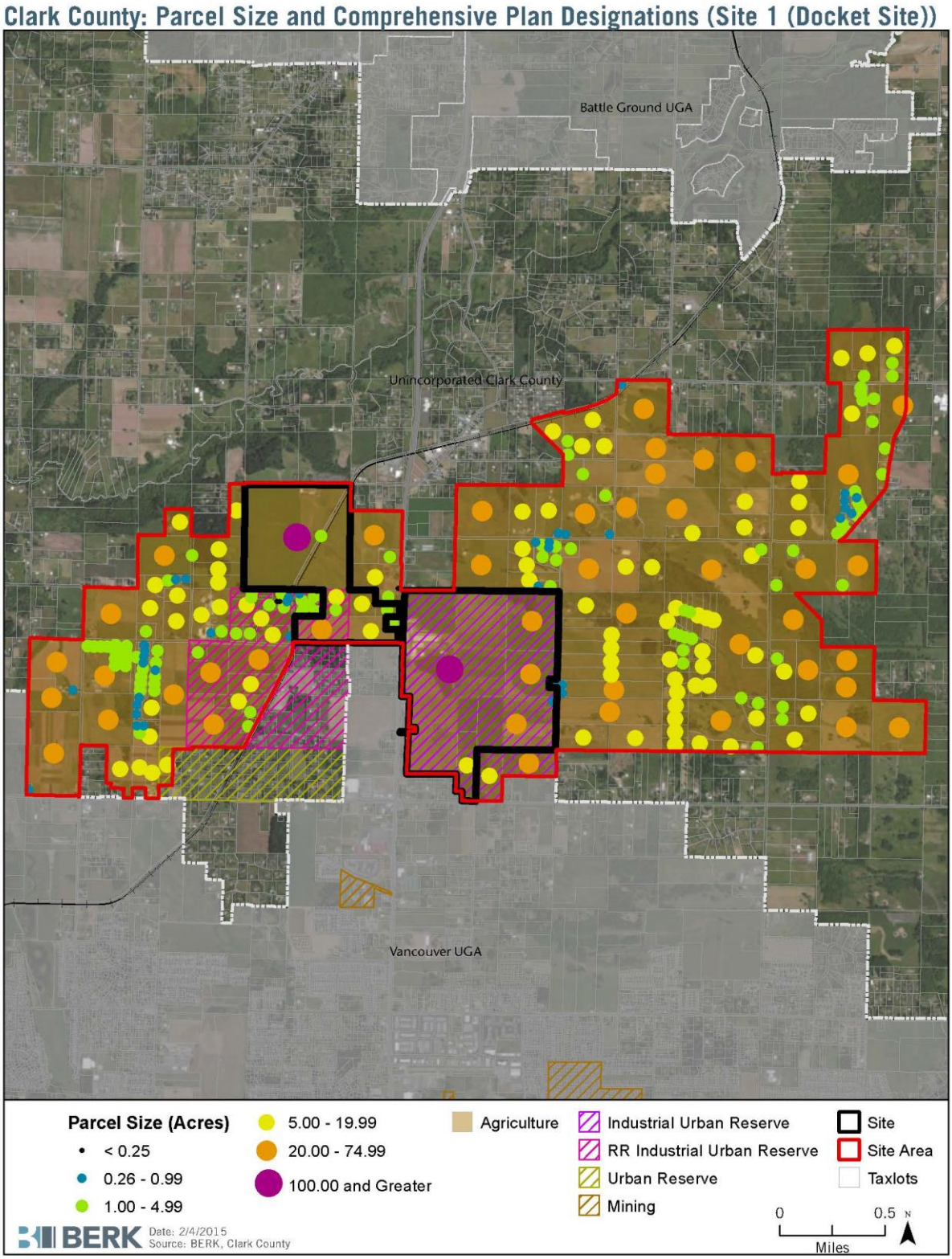
This Section presents maps specific to Site 1 and the areas surrounding it regarding Comprehensive Plan designations, Zoning designations, parcel size, infrastructure, critical areas, soils and capability class, and other relevant topics. These maps are cross-referenced throughout the analysis.

Exhibit 6. Site 1 Areawide Vicinity Map and Comprehensive Plan Land Use



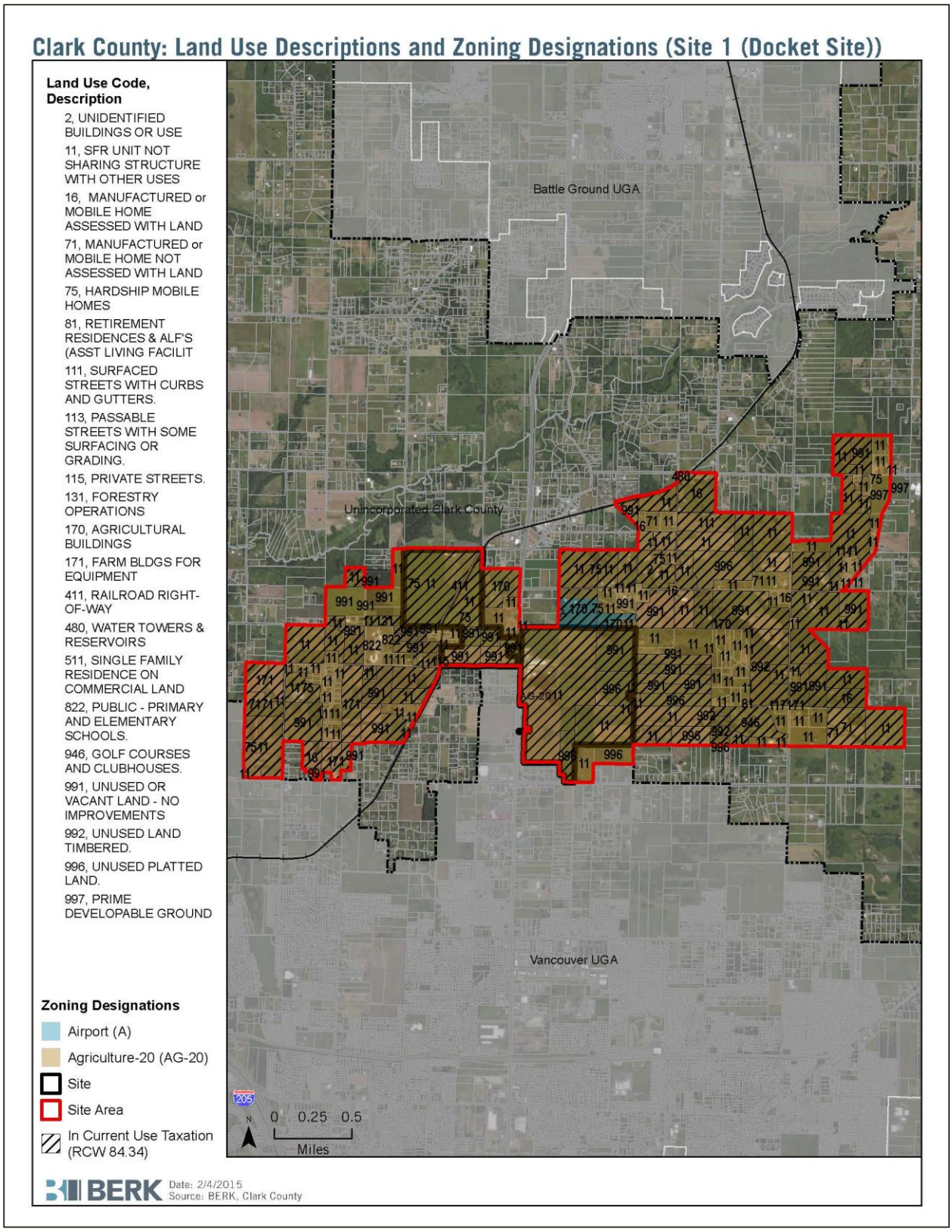
Source: BERK Consulting 2015

Exhibit 7. Site 1 Docket and Areawide Comprehensive Plan Designation and Parcel Sizes



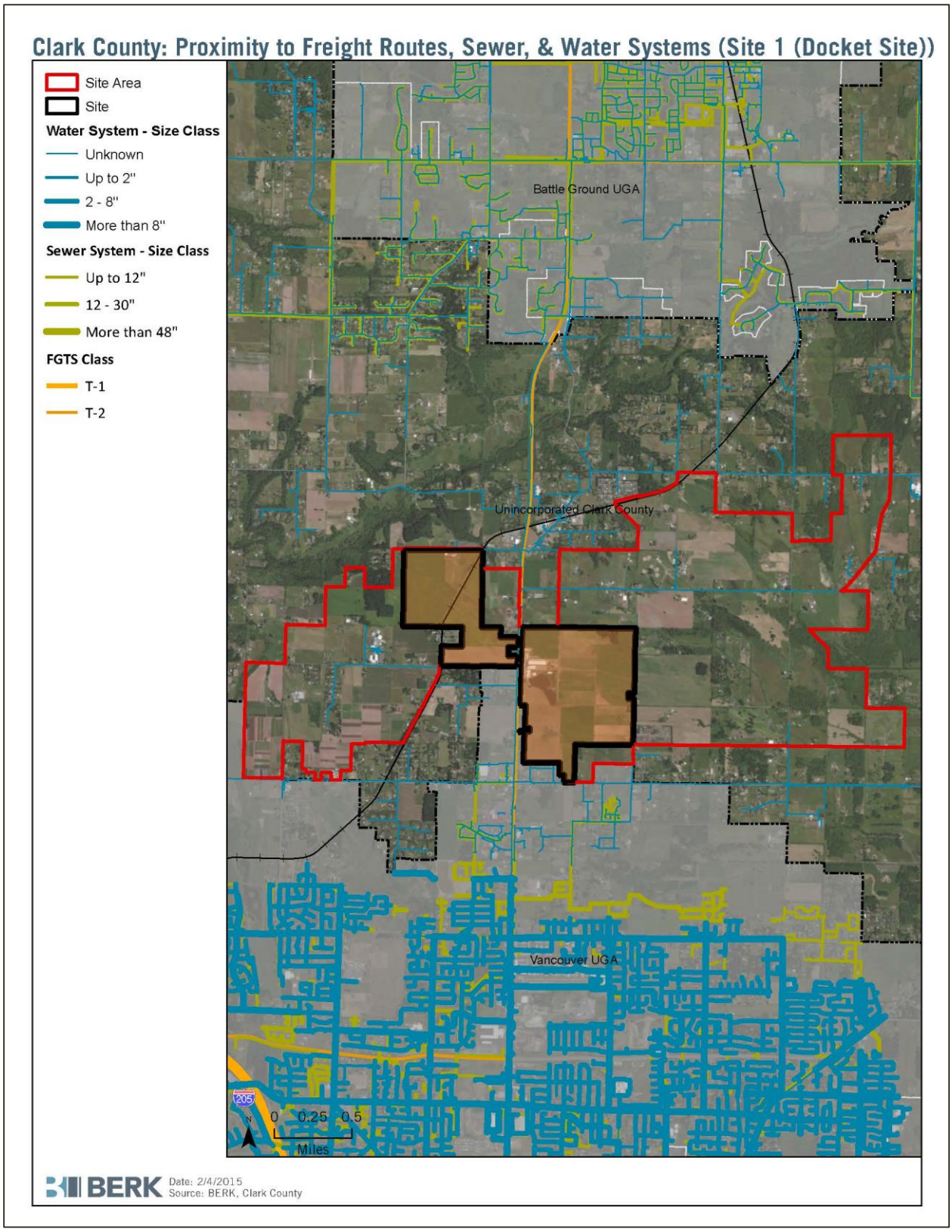
Source: Clark County GIS, BERK Consulting 2015

Exhibit 8. Site 1 Docket and Areawide Current Land Uses and Zoning



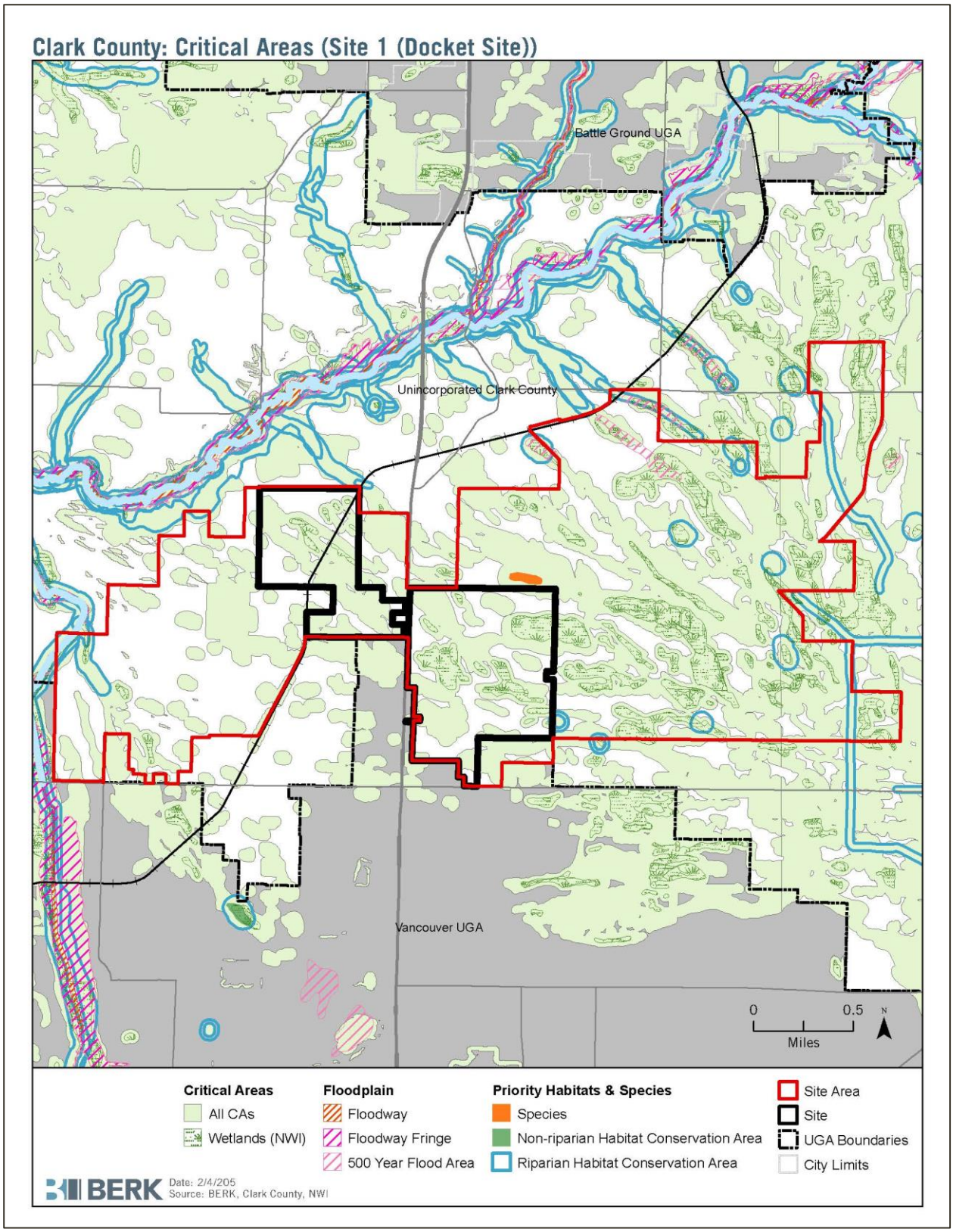
Source: Clark County GIS, BERK Consulting 2015

Exhibit 9. Site 1 Docket and Areawide Proximity of Freight Routes, Water, and Sewer Facilities



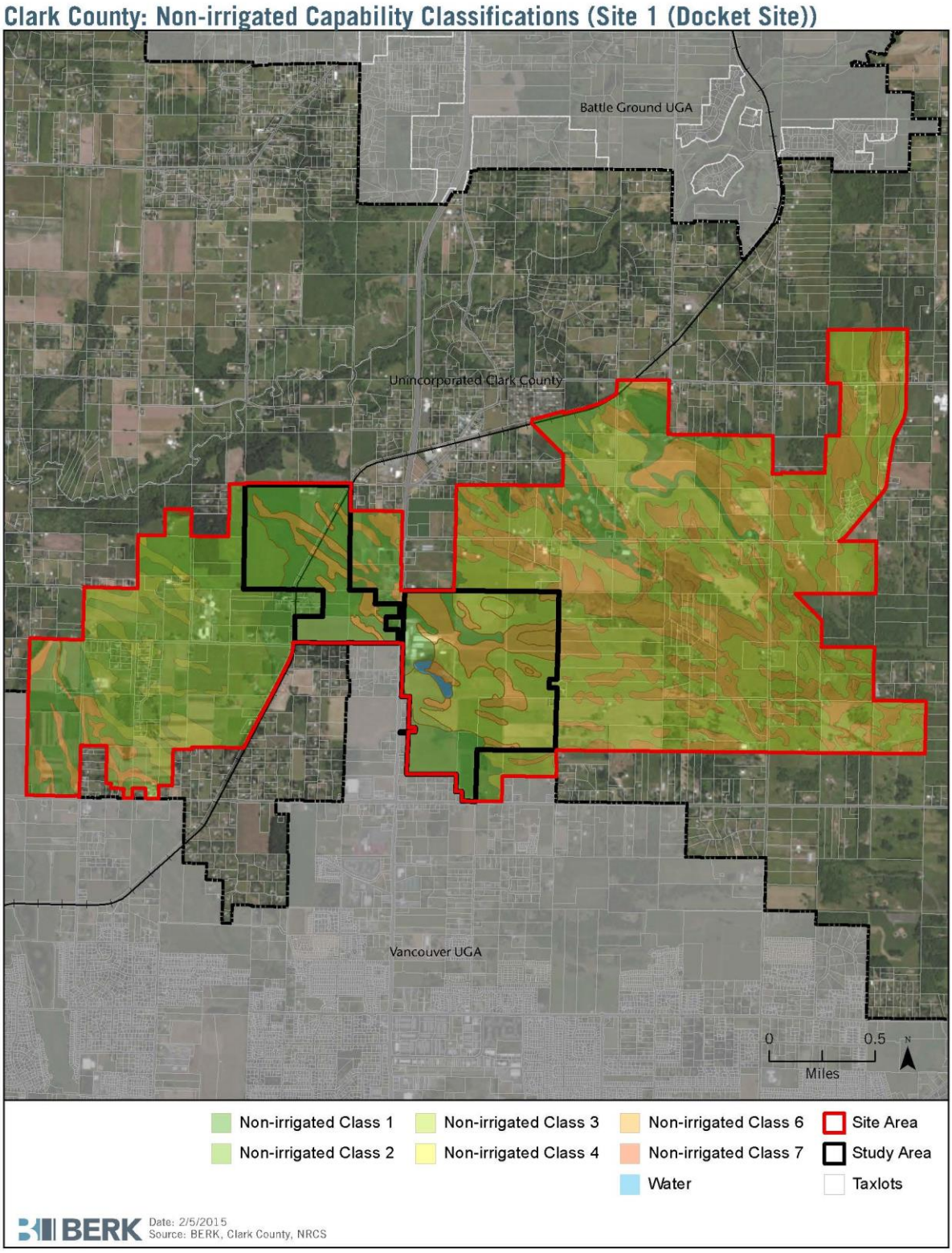
Source: Clark County GIS, BERK Consulting 2015

Exhibit 10. Site 1 Docket and Areawide Mapped Presence of Critical Areas



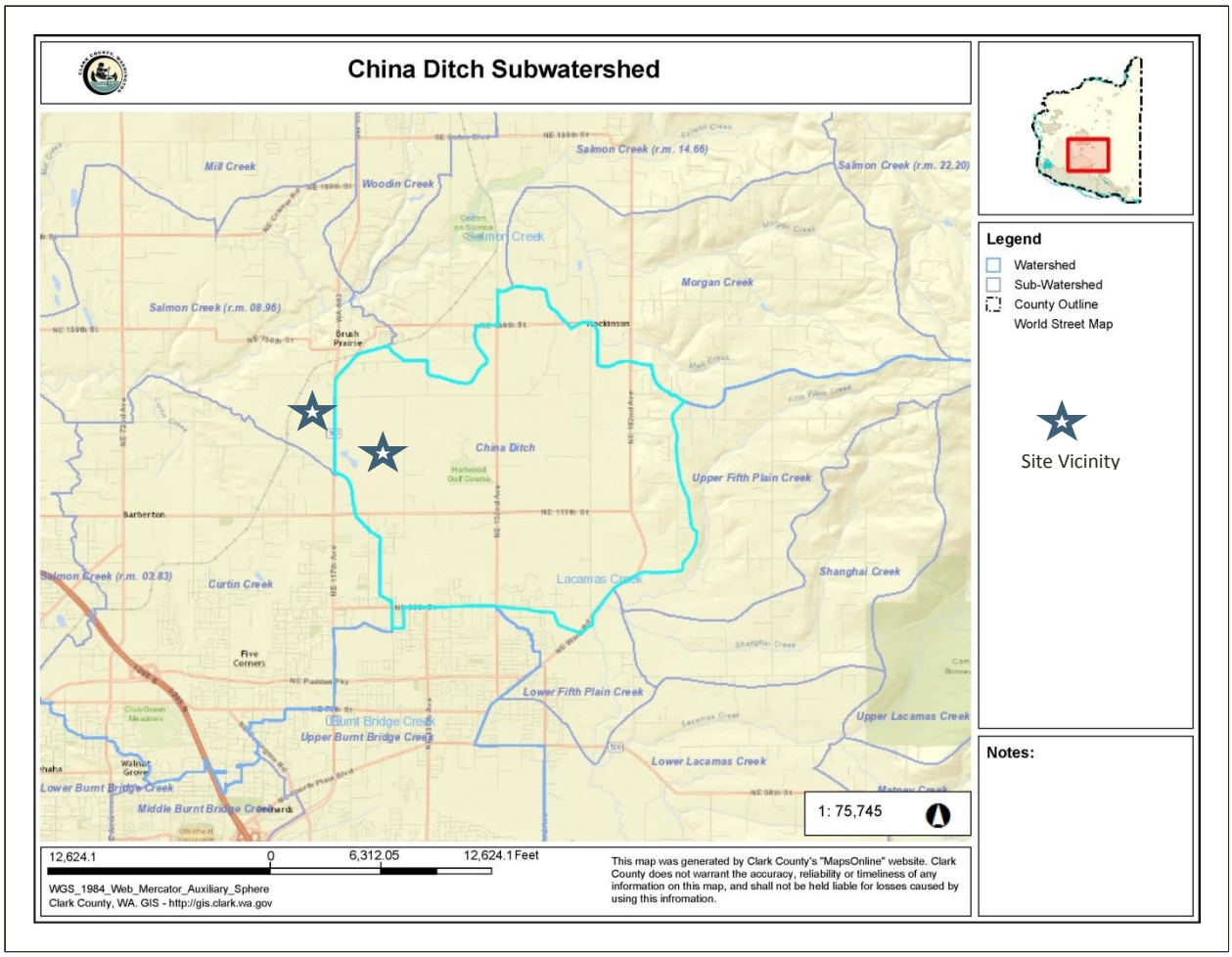
Source: Clark County GIS, BERK Consulting 2015

Exhibit 11. Site 1 Docket and Areawide Soil Capability Classes



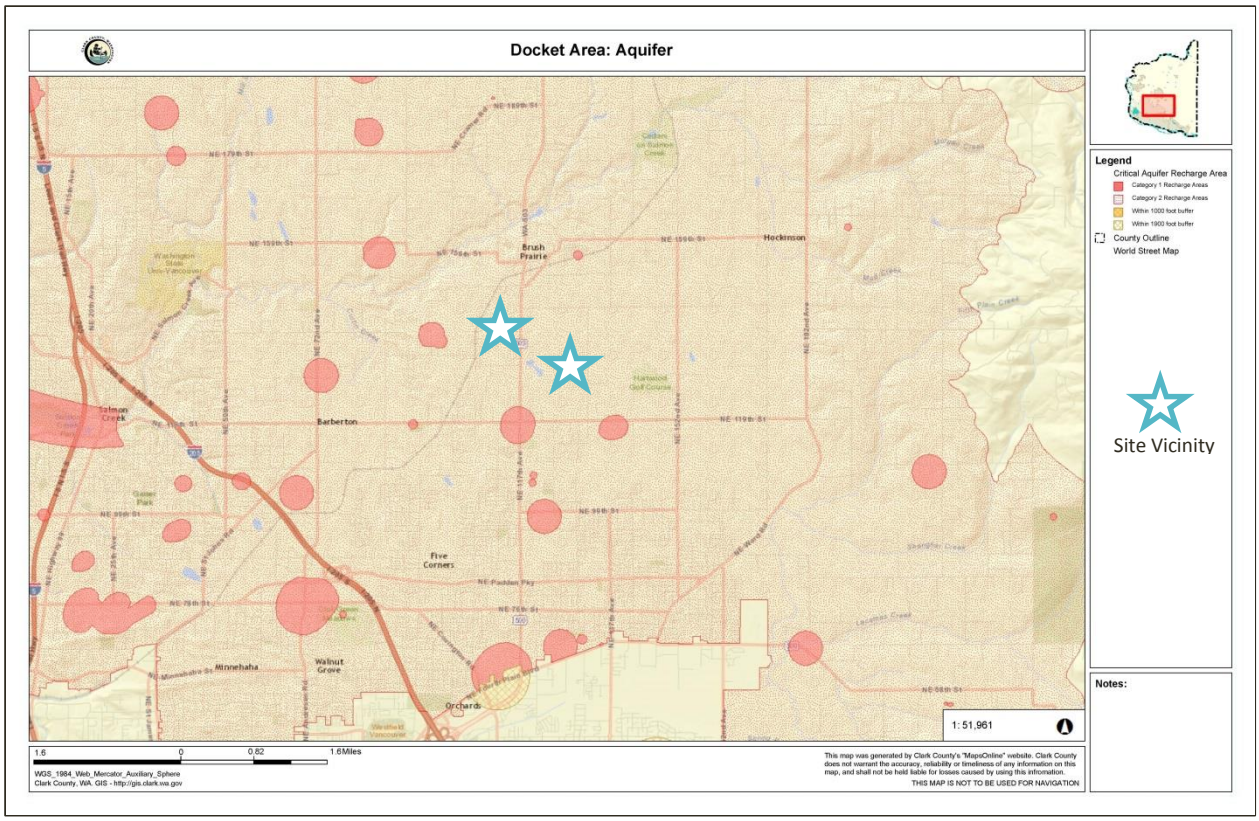
Source: Clark County GIS, BERK Consulting 2015

Exhibit 12. Site 1 Docket and Areawide Vicinity Drainage Basins



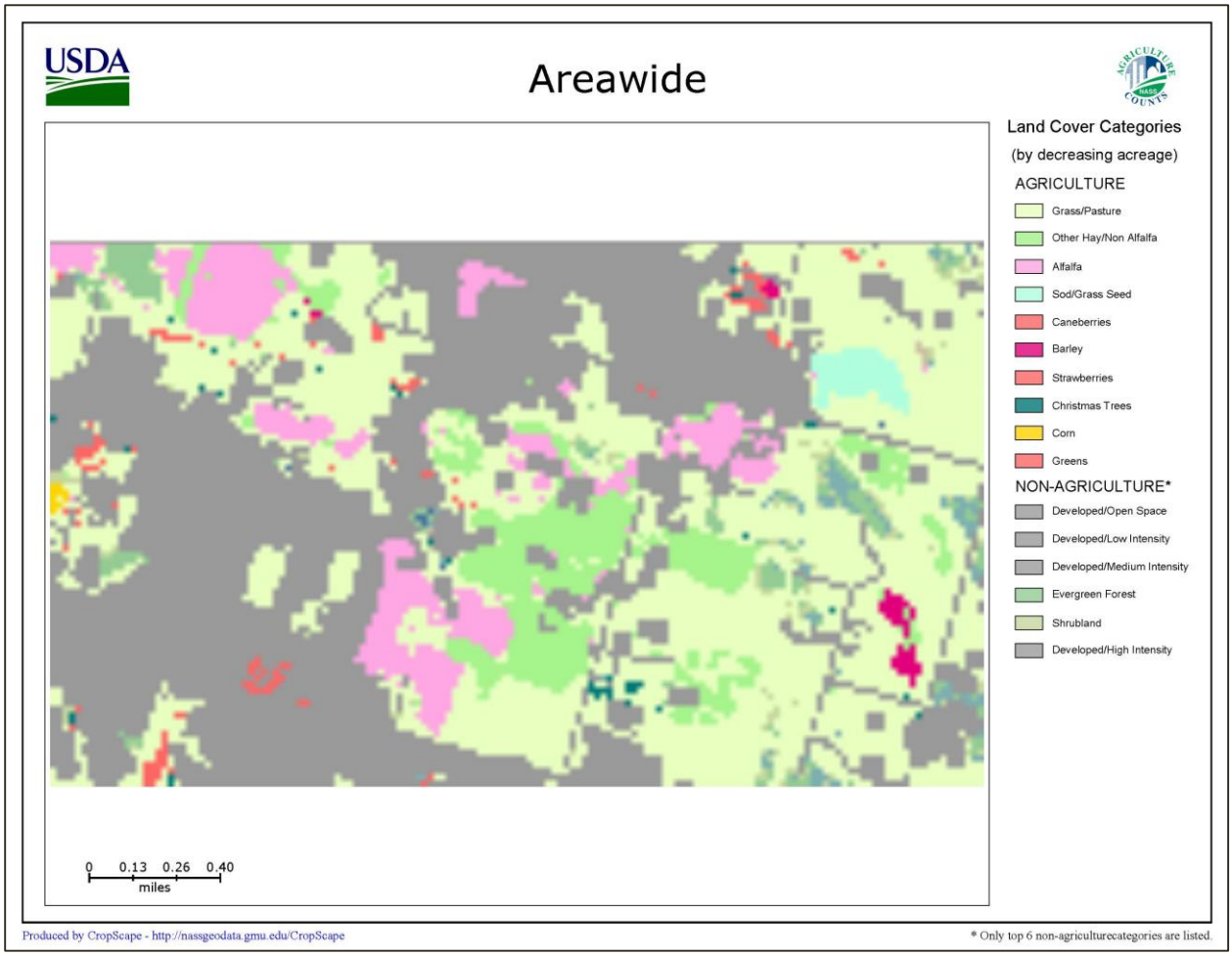
Source: Clark County GIS 2015

Exhibit 13. Site 1 Docket and Areawide Aquifer Classifications in Vicinity



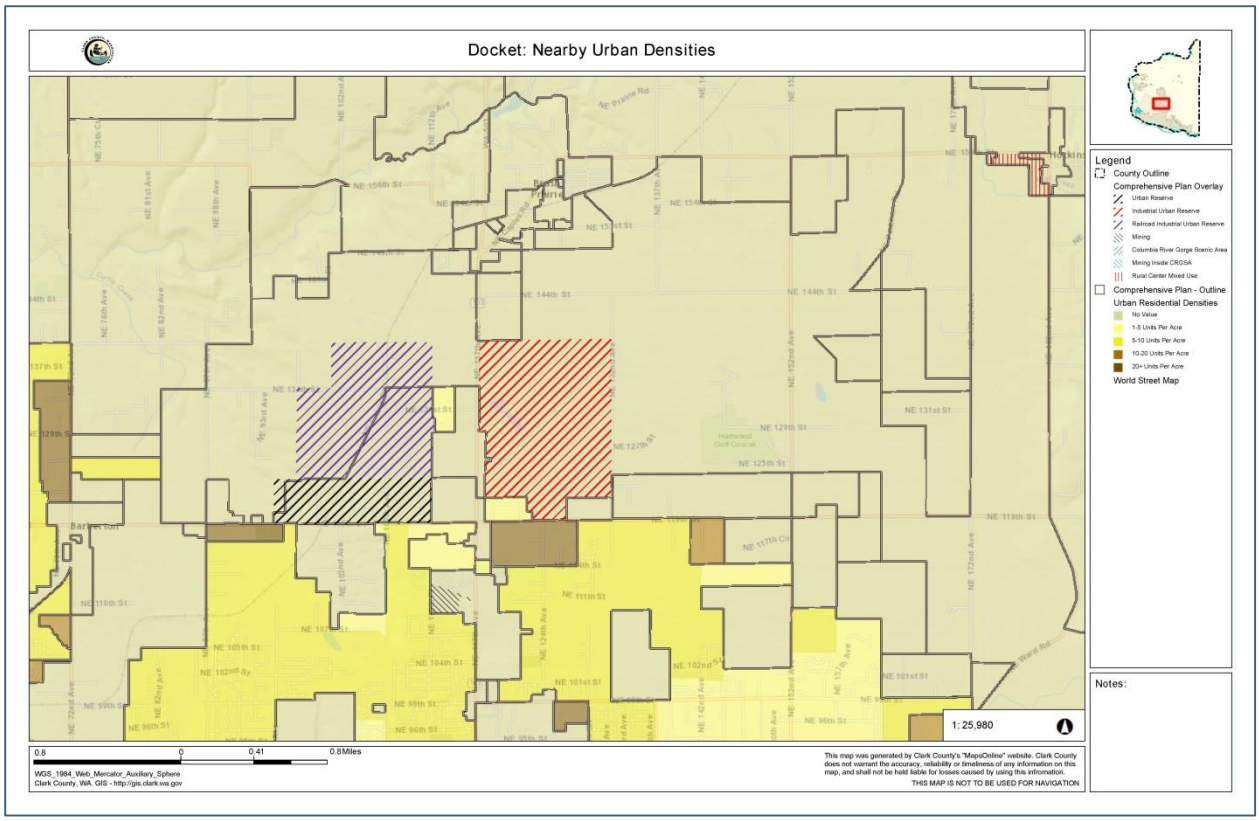
Source: Clark County GIS 2015

Exhibit 14. Site 1 Docket and Areawide
United States Department of Agriculture (USDA) CropScape Map



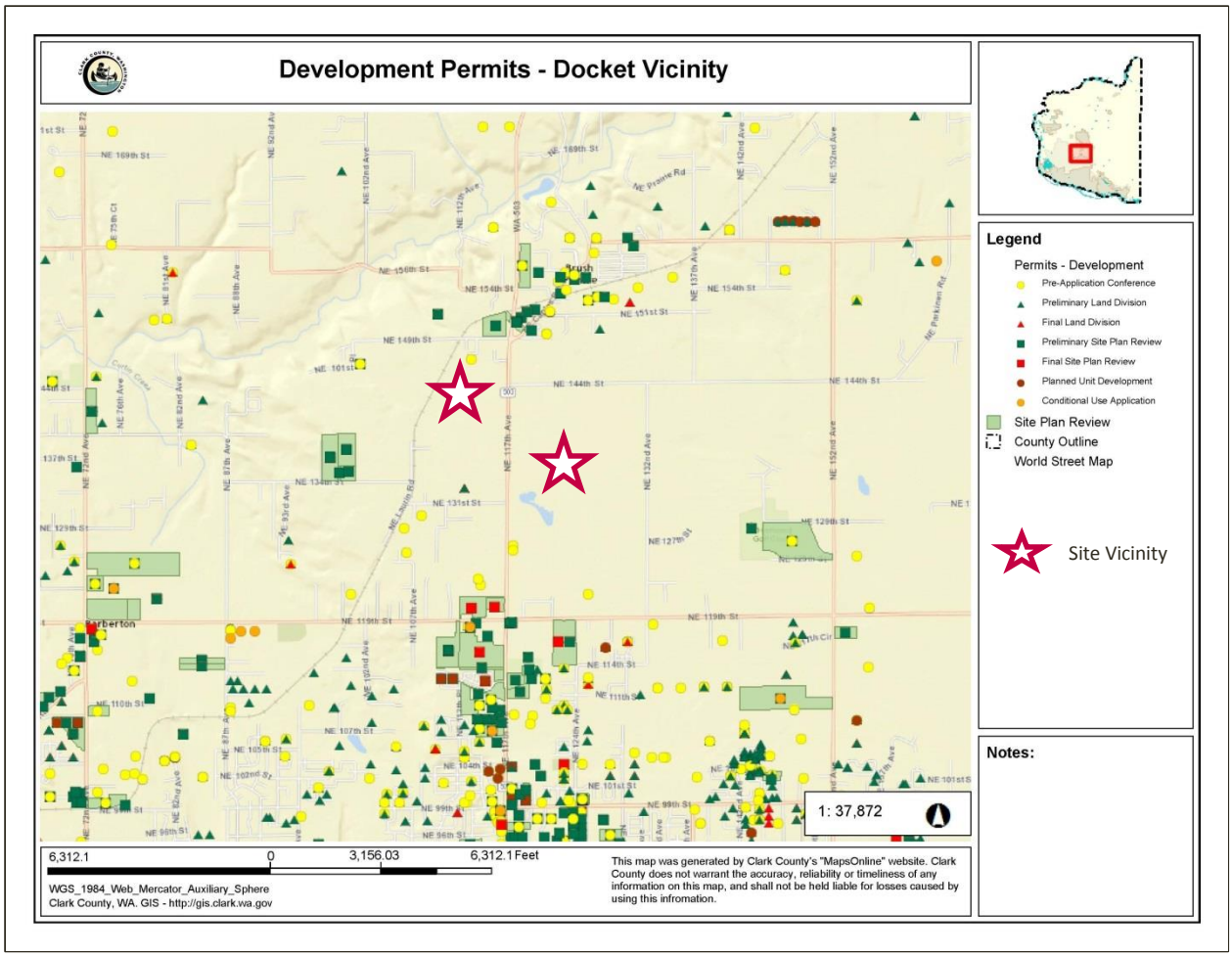
Source: USDA 2014

Exhibit 15. Site 1 and Areawide Nearby Urban Densities



Source: Clark County GIS 2014

Exhibit 16. Site 1 Nearby Permit Activity



Source: Clark County GIS 2014

2.3 Agricultural Land Classification Criteria Analysis

GMA requires protection of agricultural, forest, and mineral lands of long-term commercial significance. GMA provides guidelines for classification of resource lands in RCW 36.70A.050, and the Washington State Department of Commerce further defines them in Chapter 365-190 WAC. If Site 1 or other sites under consideration for RILB designation are redesignated as RILB's and rezoned to Light Industrial (IL), the County would consider the degree to which the lands satisfy the agricultural land classification criteria and ultimately balance GMA goals addressing resource lands and economic development.

This section presents a matrix analysis of how Site 1 and the Areawide Study Area compare to the minimum guidelines to classify agricultural lands in WAC 365-190-050. The matrix in Exhibit 17 compares Site 1 and Areawide Study Area results to the County's 2007 analysis addressing a similar geographic boundary[3]. A summary of the analysis in the matrix is provided in Section 2.4.

Exhibit 17. Matrix: Site 1 and Areawide Study Area Agricultural Land Classification Criteria Analysis

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
A.	(1) In classifying and designating agricultural resource lands, counties must approach the effort as a county-wide or area-wide process. Counties and cities should not review resource lands designations solely on a parcel-by-parcel process. Counties and cities must have a program for the transfer or purchase of development rights prior to designating agricultural resource lands in urban growth areas. Cities are encouraged to coordinate their agricultural resource lands designations with their county and any adjacent jurisdictions.	Conducted as part of Comprehensive Plan Update in 2007.	Areawide analysis is being prepared for four RILB inventory sites including Site 1, Ackerland and Lagler. See right.	The areawide study area includes Agriculture (Ag) designations between the UGAs of Battleground and Vancouver, including areas abutting Site 1 and generally continuing north, east, south and west until another non-Ag zone designation abuts, or until the contiguous Ag pattern changes (such as to the east where the Ag area is split by Rural designations or takes access from other roads). See Section 2.2.
B.	2) Once lands are designated, counties and cities planning under the act must adopt development regulations that assure the conservation of agricultural	The County has adopted development regulations to conserve agricultural resource lands.	The County has adopted development regulations to conserve agricultural resource lands.	The County has adopted development regulations to conserve agricultural resource lands.

[3] The 2007 Analysis is documented in a May 21, 2007 memo and attachments prepared by Clark County Community Planning, entitled "Bringing Resource Lands into UGAs," and directed to the Board of County Commissioners and Clark County Planning Commission. Available: http://www.clark.wa.gov/planning/RuralLands/taskforce.html. Accessed: October 2014.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
	resource lands. Recommendations for those regulations are found in WAC 365-196-815.			
C.	(3) Lands should be considered for designation as agricultural resource lands based on three factors:			
D.	(a) The land is not already characterized by urban growth. To evaluate this factor, counties and cities should use the criteria contained in WAC 365-196-310.	• The 35 parcels range in size from 0.19-222 acres. • Water lines are located within the sub area boundaries. • No sewer lines within the sub area. • Sub area is within urban reserve overlay. • Surrounded by Urban Reserve zoning.	The Site 1 study area parcels range from 0.26 to 100 acres or greater with two at 100 acres or greater. The parcels are in agricultural or rural residential use. There are agricultural buildings with a dairy operation east of SR 503. See Exhibit 7.	The Ackerland and Lagler properties are the largest properties in the study area. Other sites are 0.26-1 acre, 5-20 acres and 20-75 acres in size. See Exhibit 7.
E.	(b) The land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics. Some agricultural operations are less dependent on soil quality than others, including some livestock production operations.	IN COMMERCIAL PRODUCTION? • 3 farms are located within the sub area as identified in the Globalwise report maps • 84% in ag/farm current use program CAPABLE? • 79% prime ag soils • 66.41% critical land • hydric soils, wetland, priority species buffer	The Lagler property is primarily in use as a dairy. The Ackerland property is used for hay production. NRCS soil data show most of the land in the study area is capable of production (see land capability ratings below); some is considered to have limitations depending on whether the land is drained or due to other limiting factors. See Exhibit 11 and Appendix A. The eastern portion of the Lagler property is in Drainage District 5. The Lagler property is largely in the China Ditch sub-watershed and the Ackerland property is largely within the Salmon Creek watershed. See Exhibit 12. The pastures and fields of Site 1 are extensively managed to control surface water through drain tile in certain parcels (per description provided by property owner) and maintenance of the District 5	Much of the study area is in current use taxation for agriculture; see Exhibit 8. The NRCS soil data show most of the land in the study area is considered prime farmland soil and (see land capability rating below) and capable of production with some limitations as described for Site 1. See Exhibit 11. East of SR 503, some of the land is in Drainage District 5 and mostly in the China Ditch sub-watershed. West of SR 503, the study area is within the Salmon Creek and Curtain Creek watersheds. See Exhibit 12. Similar to Site 1, it is anticipated that much of the land non-irrigated and is drained. A student research paper

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
			drainage system on the eastern property. (Anchor QEA February 2015) See Appendix B.	addressing a Lacamas Lake Watershed Research Project indicated that the China Ditch sub-basin contains fields and pasture that have manmade channels to drain wetlands for agricultural use, and that the marshy land is not suited for urban development.[4]
F.	(i) Lands that are currently used for agricultural production and lands that are capable of such use must be evaluated for designation. The intent of a landowner to use land for agriculture or to cease such use is not the controlling factor in determining if land is used or capable of being used for agricultural production. Land enrolled in federal conservation reserve programs is recommended for designation based on previous agricultural use, management requirements, and potential for reuse as agricultural land.	See 3(b) above. Three farms in production noted.	The property is used for agriculture as indicated in docket application materials, aerial photos, and Assessor land use codes. Based on United States Department of Agriculture (USDA) Crop Scape data[5], the Lagler property east of SR 503 is shown as in Alfalfa production, and the Ackerland property west of SR 503 is mapped as growing oats and wheat. See Exhibit 14.	Based on current use taxation records it appears that much of the land is used for agriculture, though some for residential, school, or golf course uses. The USDA Crop Scape data indicates Alfalfa, hay, cranberries, and barley are being grown in the study area, but a large part of the area is in grass/pasture, and non-Agriculture. See Exhibit 14.

[4] Beam, Cheryl. November 30, 2004. Lacamas Lake Watershed Research Project. Available: http://beamers1.home.comcast.net/~beamers1/LacamasLakeWatershed.pdf.

[3] The USDA, NASS Cropland Data Layer (CDL) is a raster, geo-referenced, crop-specific land cover data layer. The 2014 CDL has a ground resolution of 30 meters. The CDL is produced using satellite imagery collected during the current growing season. No farmer reported data are derivable from the Cropland Data Layer.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
G.	(ii) In determining whether lands are used or capable of being used for agricultural production, counties and cities shall use the land-capability classification system of the United States Department of Agriculture Natural Resources Conservation Service as defined in relevant Field Office Technical Guides. These eight classes are incorporated by the United States Department of Agriculture into map units described in published soil surveys, and are based on the growing capacity, productivity and soil composition of the land	Prime farmland classes considered. Land capability class appears not to have been addressed.	The study area contains non-irrigated Class 1, 2, and 3 farmland soils with some Class 6 soils. See Exhibit 11. According to the NRCS, capability levels are high or moderate for Class 1 and 2 soils and limited for Class 3, and in particular Class 6: Class 1 39% Class 2 9% Class 3 28% Class 4 0% Class 5 0% Class 6 22% Class 7 0% Water 1% Total 100% Class 1 soils have few limitations that restrict their use. Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices. Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both. Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.	The areawide information shows that the area contains non-irrigated Class 1, 2, 3, 4, 6, and 7 soils. See Exhibit 11. Capability levels are high or moderate for Class 1 and 2 soils and limited for Class 3, and more limited for categories 4, 6, and 7. Class 1 18% Class 2 15% Class 3 38% Class 4 0.1% Class 5 0% Class 6 28% Class 7 0.1% Water 0% Total 100.0% Classes not described at left are: Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both. Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.
H.	(c) The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should consider the following nonexclusive criteria, as applicable:			

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
I.	(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service;	79% prime ag soils	About 76% of site soils are considered prime farmland. A portion (23%) is prime farmland if drained. The site is drained by ditches and tiles (see Appendix B). Therefore up to 99% of the soils are considered as prime farmland. See Appendix A.	About 67% of soils are considered prime farmland. A portion (22%) are considered prime farmland if drained. Therefore between 67-89% of soils are considered prime farmland. See Appendix A.
J.	(ii) The availability of public facilities, including roads used in transporting agricultural products	Water lines are located within the sub area boundaries. Education facilities adjacent. Airport adjacent. The sub area is split by SR 503.	SR 503 splits the two properties under consideration. It is a designated freight route and an arterial. See Exhibit 9. SR 503 average daily traffic northbound at NE 119th Street at the southern property boundary carries: 13,959 ADT (2012). Southbound SR 503 at 19th Street carries 14,015 ADT (2012). The state route carries urban traffic, and is not a rural road used primarily for the transport of agricultural products. WSDOT has indicated a concern about adding no new traffic signals between NE 119th and NE 159th Streets along SR 503. There is a small airport landing strip north of the Lagler property. There are adjacent education facilities near the Ackerland property. Water lines run along SR 503 and NE 119thand NE 149h Street and serve the properties. Sewer is located in the UGA south of the sites around NE 119th Street.	The analysis is similar as for Site 1 by itself. Water lines traverse the area. Sewer lines are closest located south of the area in the Vancouver UGA and along SR 503 in proximity to the Lagler Property. SR 503 serves as an arterial and freight route.
K.	(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights;	84.01% in ag/farm current use program	All of the subject property is in the agricultural current use taxation program. See Exhibit 8.	Most of the properties in the study area are in current use taxation. See Exhibit 8.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
L.	(iv) The availability of public services;	See ii above	The property north of the Lagler site east of SR 503 is zoned as Airport and is privately owned. The property is called the Brush Prairie Aerodrome and allows usage by 10 single engine aircraft.[6] Summit View High School lies north of the Ackerland property west of SR 503. Laurin Middle School and Glennwood Heights Elementary school are southwest of the Ackerland property. Fire protection is provided by Fire District 3 for the vast majority of the property. The southwest portion of the Ackerland property is in Fire District 5. Law enforcement is provided by the Clark County Sheriff, from the Central Precinct at 505 NW 179th Street Ridgefield, WA 98642. The eastern portion of the Lagler property is in Drainage District 5.	Airport: See Site 1 information. Schools: Laurin Middle School and Glennwood Heights Elementary school are in the study area boundary. Summit View High School lies north of the Ackerland property west of SR 503. Fire protection: Fire Protection District 3 services areas east of SR 503 and most of the Ackerland property and some adjacent areas west of SR 503. Fire District 5 serves most of the area west of SR 503. Sheriff: Same as for Site 1.
M.	(v) Relationship or proximity to urban growth areas;	Southern tip of sub area boundary borders Vancouver's northern UGA boundary	The site is connected to the Vancouver UGA on the south. See Exhibit 6.	The area is between the UGAs of Battleground and Vancouver but lies closer to the Vancouver UGA and its infrastructure and services.
N.	(vi) Predominant parcel size;	Range 0.19- 222.16 acres Median parcel size: 22.42 acres	The property contains parcels of just less than 0.26 acres to more than 100 acres. See Exhibit 7.	The Ackerland and Lagler properties are the largest properties in the study area. Other sites are 0.26 - 1 acre, 5-20 acres and 20-75 acres in size. See Exhibit 7.

[6] AirNav.com. 2015. Brush Prairie Aerodrome. Available: http://www.airnav.com/airport/5WA9.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
O.	(vii) Land use settlement patterns and their compatibility with agricultural practices;	The land within the sub area boundary is characterized by rural land uses (open fields, farms, rural residential) Farms are classified as: Livestock/Dairy; Vegetable/Fruit; and Specialty.	The property is generally open in character, except for the dairy buildings and some homes. UGA territory is to the south and commercial and residential uses have been developed. Permit activity shows both commercial and residential permits. See Exhibit 16.	Agricultural structures and agricultural land extend through most of the study area. There are residential uses on the agricultural properties and pockets of residential neighborhoods such as to the east of the Lagler site. Southwest of the Ackerland site in the study area is the Glennwood Heights Elementary School and Laurin Middle School. Southeast of the Lagler site in the study area is Hartwood Golf Course.
P.	(viii) Intensity of nearby land uses;	Surrounding area is comprised of open space, rural residential (R-5 zone) and there is a Rural Center to the North. Urban Holding overlay was recently lifted on parcels to the south of sub area.	Residential density south of NE 119th Street ranges from 5-10 units per acre, 10-20 units per acre, and 20+ units per acre. See Exhibit 15.	Same as for Site 1 south of the study area. Within the study area, the densities range with some lots closer to urban densities (0.26 - 0.99 acre) and other rural in character (< 5 acres). Most lots have homes on them.
Q.	(ix) History of land development permits issued nearby;	150-unit condo project (Delyria) to south within UGA	Over time there have been a series of permit applications south of the sites along NE 119th Street and north of NE 149th Street. See Exhibit 16.	Same as for Site 1. The permit applications have been more prevalent in areas encircling the study area in the Vancouver and Battleground UGAs. There have been some permits in the study area such as at the Golf Course or sites along the arterials near Ackerland.
R.	(x) Land values under alternative uses; and	AG-20: $16/acre Proposed zoning: Light Industrial: $127/acre	Land values for non-agricultural uses of the Lagler and Ackerland properties are significantly greater than for agricultural uses. The 2014 market value of the Lagler land east of SR 503, according to the Assessor, is $1,490,797.00. With buildings, the value is $2,268,396.00. Due to the current use assessment the property is being taxed at a lower rate than its market value at $885,058.00. The land value under market conditions is significantly higher.	Similar results as for Site 1 as most of the properties are in current use taxation.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
			The 2014 market value of the Ackerland land west of SR 503 is $2,074,436.00. With buildings, the value is $2,219,692.00. The property is taxed at a value of $307,031.00 given its current use assessment. The land value under market conditions is significantly higher. If the docket study area were used for light industrial purposes rather than rural purposes, it is likely the value of the land would be higher than the difference already seen between the assessed value and market value.	
S.	(xi) Proximity to markets.	In close proximity to Vancouver UGA market.	Vancouver is the primary market for local food. However, the Lagler dairy provides its milk products to the Tilamook Cooperative. The Ackerland property provides hay/silage for animal feed to the Lagler dairy.	Vancouver is the primary market for local food.
T.	(4) When designating agricultural resource lands, counties and cities may consider food security issues, which may include providing local food supplies for food banks, schools and institutions, vocational training opportunities in agricultural operations, and preserving heritage or artisanal foods.		In Clark County the number of small farms has been increasing over time, and represents more intensive, value-added, urban-oriented farming. [9] As described above, the Lagler dairy does not sell its product locally. Other small operators in the County do, such as: • Dobler Hill Dairy, LLC, Woodland • Spanish Sonrise Dairy, Yacolt • Vantol Dairy, La Center[7] See also Site 4 analysis. The Clark County Food System Council addresses food security in the County and is promoting the use of	Similar analysis as for Site 1. In Clark County the number of large and medium size farms has been declining and small farms has been increasing over time, and represent more intensive, value-added, urban-oriented farming.[9]

[7] Washington State University (WSU) Extension Farm and Crop Locator: http://smallfarms.wsu.edu/farms/search_result.asp.

[9] BERK. 2012. Clark County Rural Lands Study. Available: http://www.clark.wa.gov/planning/rurallands/index.html.

<table>
<tr><th></th><th>WAC 365-190-050 Criteria</th><th>2007 Analysis: Site 1</th><th>2015 Analysis: Site 1</th><th>2015 Analysis: Areawide Study Area surrounding Site 1</th></tr>
<tr><td></td><td></td><td></td><td>locally grown food for the emergency food system, supporting the trend of urban faming, the availability of locally grown food in local stores, as well as promoting agricultural activity and production across the county. [8]</td><td></td></tr>
<tr><td>U.</td><td>(5) When applying the criteria in subsection (3)(c) of this section, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities.</td><td></td><td>The number of farms across the County increased between 1997 and 2012, but between 2007 and 2012 had a slight decline:
<table>
<tr><th></th><th>1997</th><th>2002</th><th>2007</th><th>2012</th></tr>
<tr><td>Total Farms with Sales - Specified Products</td><td>1,124</td><td>1,651</td><td>2,283</td><td>2,058</td></tr>
<tr><td>Total Farms with Sales Not Specified</td><td>1,765</td><td>1,596</td><td>2,101</td><td>1,929</td></tr>
</table>
The number of dairies in the County has steadily decreased in the county according to the US Census of Agriculture. Between 1997 and 2012 the number of dairies went from 32 to 9; the most recent decline went from 25 in 2002 and 2007 to 9 in 2012.

Hay and forage land represents the top cropland in acres in the County, 17,541 acres of 74,758 acres in farms. The number of farms with crops and hay shows an increase between 2002 and 2007 and a more recent decline in 2012:</td><td>Similar analysis regarding economic viability as for Site 1.

The Docket Site 1 consists of about 602 acres. This is about 19% of the areawide acreage of 3,196.

If Site 1 were removed from the AG-20 designation most of the study area would remain in AG-20 zoning. The area west of SR 503 would be more isolated from the AG-20 areas east of SR 503. However, there is no known interdependence among the agricultural businesses as there is between the Ackerland and Lagler sites (Ackerland site provides feed and pasture for Lagler dairy). [15]</td></tr>
</table>

[8] Clark County Food System Council. 2013. Policy Roadmap for Clark County's Food System: Strategies for Change October 2013-14. Available: http://www.clark.wa.gov/public-health/about/documents/RoadmapWorkPlan2013-14.pdf.

[15] Personal communication, Doug Stienbarger, County Director, Faculty, Community & Economic Development, WSU Clark County Extension. February 17, 2015. Email to Lisa Grueter, Manager, BERK Consulting.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1

	1997	2002	2007	2012
Crops & Hay	Not available	284	429	368

Regarding trends of agriculture across the County, findings of the Rural Lands Study[10] included:

Key Finding #1: Agriculture in Clark County in 2011 is in the midst of a decade's long transition from large scale commodity farming into more intensive, value-added, urban-oriented farming.

Key Finding #2: Large farm and mid-size farms are declining in number, acres, and value. However, they remain a viable enterprise but face a multitude of challenges.

Key Finding #3: A diverse set of small farms and enterprises are increasingly becoming part of the rural landscape.

The findings show the number of farms has been increasing (e.g. 2002-2007) but has been experiencing a decline in average size and are becoming more urban oriented.

Based on the Rural Lands Study[10], there has been a "decline in the number of commercial and mid-sized farms in Clark County between 1997 and 2007, and presumably through 2012 (relayed anecdotally from key informants)." The long-term outlook for larger farms in Clark County is in transition due to water rights, labor, and access farm supportive services: "Consolidation in some sectors of the agricultural industry is taking crop production out of the State (and occasionally out of the country). Increasing labor

[10] BERK. 2012. Clark County Rural Lands Study. Available: http://www.clark.wa.gov/planning/rurallands/index.html.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
			costs and uncertainty (due to federal immigration policies) make labor intensive crop production unattractive to many commercial farms."[10] The 2012 Rural Lands Study indicated that milk production was experiencing some stability due to milk prices: "There is some sense that certain agricultural products—particularly those that are established and are not labor intensive—have a future in the county. Milk products provide the greatest share of commodity totals in Clark County and the number of milk-producing farms has stayed constant between 2002 and 2007, while experiencing modest growth in output due to rebound in commodity value of milk. Some farmers also mentioned that demand is not currently being met in this commodity area."[11] It should be noted that the Rural Lands Study did not have access to the 2012 Census of Agriculture results at the time. Though the number of dairies was at 25 in both the 2002 and 2007 Census reports, dairies have since been reduced to 9 according to the 2012 Census of Agriculture. The value of milk production from cows in 2012 is $14.5 million out of the total value of all agricultural products at $50.9 million. Presently, milk production is a relatively large share in the total value of agricultural products, though the long-term trends of large and mid-size farms is one of decline. Reasons for the decline in dairies may include: The cost of running a smaller dairy has increased, as have regulatory requirements such as water quality. Lower	

[11] BERK. 2012. Clark County Rural Lands Study. Available: http://www.clark.wa.gov/planning/rurallands/index.html.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
			land prices, lower rainfall, and the efficiencies gained with a larger operation and management have led many dairies to move from Western Washington to Eastern Washington.[12] [13] Further the cost of expanding a dairy or starting a dairy is higher in Clark County and Western Washington. Even if there is current use taxation, the cost to purchase the land is based on market value. This is especially true for a dairy farm which requires a larger land base to handle nutrient application from the manure generated. Waste management costs on the west (wet) side of the mountains increase with the relatively plentiful rain (increases the material needed to spread; limits times of year material can be spread due to environmental concerns, etc.). Given the cost of starting from scratch, the other strategy is to acquire a dairy in transition. Since many farmers use their farm as their "retirement plan", the cost remains prohibitive. While dairy farmers probably average in their 60's, their heirs may be not interested in taking over the operation and the property would be sold.[14]	

[12] Dairy Herd News Source. January 17, 2011. Washington dairies moving to eastern part of state. http://www.dairyherd.com/dairy-news/latest/washington-dairies-moving-to-eastern-part-of-state-113939604.html.

[13] Emailed WSU Extension and Clark Conservation Districts to discuss. Pending response.

[14] Personal communication, Doug Stienbarger, County Director, Faculty, Community & Economic Development, WSU Clark County Extension. February 17, 2015. Email to Lisa Grueter, Manager, BERK Consulting.

	WAC 365-190-050 Criteria	2007 Analysis: Site 1	2015 Analysis: Site 1	2015 Analysis: Areawide Study Area surrounding Site 1
V.	(6) Counties and cities may further classify additional agricultural lands of local importance. Classifying additional agricultural lands of local importance should include, in addition to general public involvement, consultation with the board of the local conservation district and the local committee of the farm service agency. It may also be useful to consult with any existing local organizations marketing or using local produce, including the boards of local farmers markets, school districts, other large institutions, such as hospitals, correctional facilities, or existing food cooperatives. These additional lands may include designated critical areas, such as bogs used to grow cranberries or farmed wetlands. Where these lands are also designated critical areas, counties and cities planning under the act must weigh the compatibility of adjacent land uses and development with the continuing need to protect the functions and values of critical areas and ecosystems.	The County has not designated agricultural land of local importance. This is an optional policy choice.	The County has not designated agricultural land of local importance. This is an optional policy choice.	Same as for Site 1.

2.4 Summary and Conclusions

Site 1

The Site 1 Ackerland and Lagler properties are zoned and used for agriculture and contain a majority of prime farmland soils. The type of farm operations is large in the County's range of agricultural properties. The long-term trend is of decline in large and mid-size operations, and rather an increase in small farms oriented to the urban, local food movement.

The agricultural market is showing an increase in small value added production and direct sales, community supported agriculture (CSAs), and other newer local food trends. The subject properties are not part of the local food system. Larger and mid-size farms by contrast have been ceasing operations as they are consolidated or moved to other areas of the state or country where such operations can be more profitably operated.

The subject sites are in proximity of urban uses at urban densities, with urban services including water and sewer. Schools are located in proximity to the sites. Fire protection is by special districts and police protection would remain with the Clark County Sheriff. There has been recent permit activity regarding commercial and residential uses to the south and north of the sites. The volume of traffic on SR 503 is that of an urban arterial.

Subject sites are under current use taxation, and thus the effect of growth pressures is not felt fiscally. The value of the land under urban uses would be greater.

The RILB Inventory (BERK Consulting et al. September 2015, under separate cover) shows the property meets screening criteria to be considered a RILB.

Allowing the dairy to relocate to eastern Washington ensures continuation of the agricultural operation, rather than cessation and an underutilized parcel.

Areawide

Site 1 consists of about 602 acres. This is about 19% of the areawide acreage of 3,196. If Site 1 were removed from the AG-20 designation, about 80% of the areawide study area would remain in AG-20 zoning. The area west of SR 503 would be more isolated from the AG-20 areas east of SR 503. There is no known interdependence among the agricultural businesses as there is between the Ackerland and Lagler sites (Ackerland site provides feed and pasture for Lagler dairy).

Within the study area, the uses are typically agriculture but there are pockets of residential lots, educational and recreational uses.

The removal of the Site 1 properties from the areawide acreage would continue the decline in large and mid-size operations, and would remove some of the larger parcels in the County's AG-20 inventory. This trend would likely continue with or without the Site 1 properties, and the trend towards small farms would likely continue.

As with Site 1, the areawide study area lies in proximity of urban uses at urban densities, with urban services including water and sewer, particularly from the Vancouver UGA. There are schools within the study area. Emergency services are provided by two fire districts and the Clark County Sheriff and these would continue in any case. There has been recent permit activity regarding commercial and residential uses encircling the study area. The volume of traffic on SR 503 is that of an urban arterial; other arterial border the study area.

Most of the area is in current use taxation, and it is likely the value of the land for urban uses would be higher than for the use under agriculture.

3.0 SITE 2 AND AREAWIDE STUDY AREA

3.1 Study Area Description

This evaluation addresses Site 2 and an area similarly designated and zoned surrounding Site 2 north of Ridgefield. See Exhibit 18.

Exhibit 18. Site 2 and Areawide Study Area Description

Description	Comments
Site 2: Ridgefield N	Site 2 is approximately 412 acres and lies north of the Ridgefield city limits along I-5.
Areawide Analysis: AG-20 Zoning in Vicinity of Site 2	The areawide study area includes Agriculture (Ag) designated land between the UGAs of LaCenter and Ridgefield, including areas abutting Site 2 and generally continuing north, east, south and west until another non-Ag designation abuts, or until I-5 is reached.

3.2 Maps Reviewed

A series of maps were reviewed as described in Exhibit 19 in order to conduct the Site 2 and Areawide analysis of agricultural land designation criteria in Section 3.3.

Exhibit 19. Maps Reviewed: Site 2 and Areawide Study Area

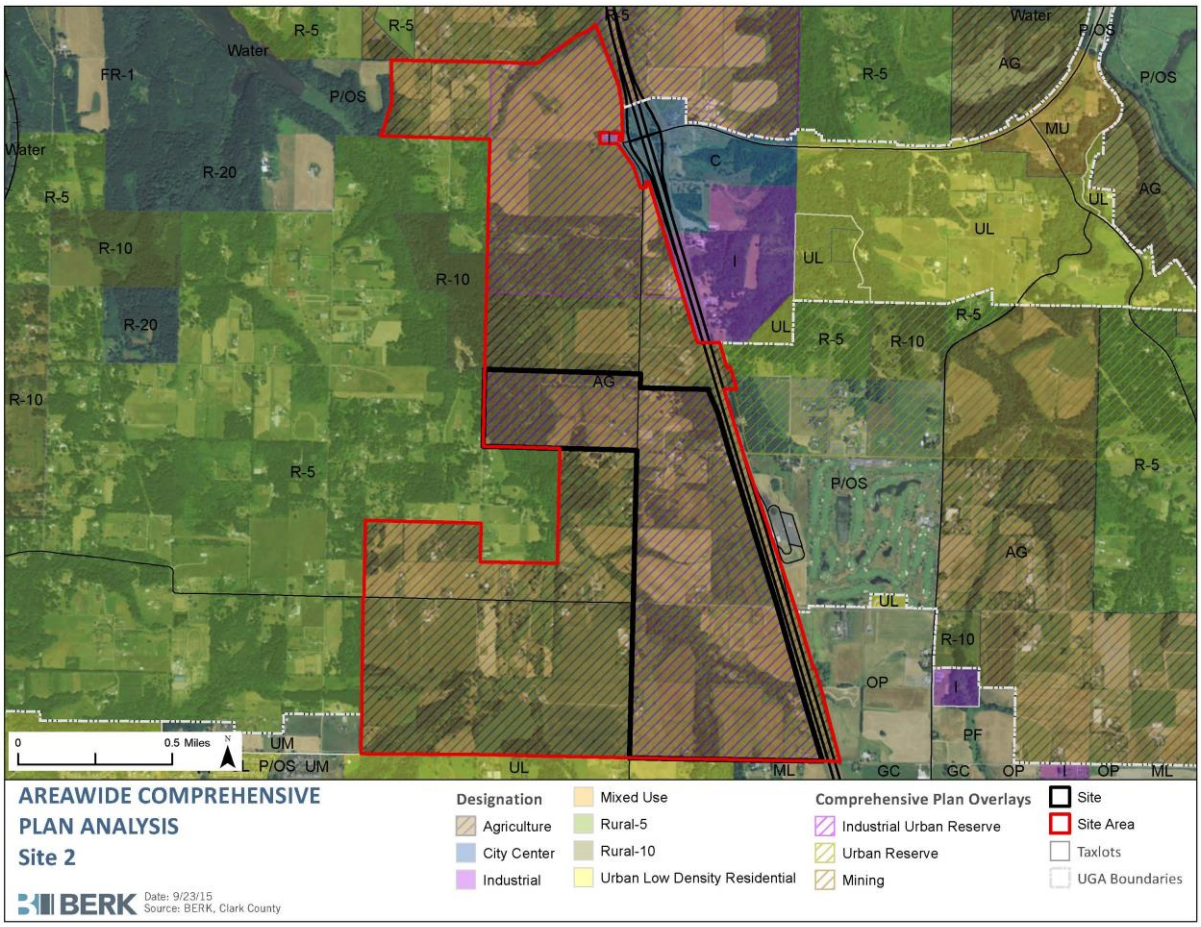
Maps	Comments
Comprehensive Plan	Site 2: Site of approximately 412 acres is fully in Industrial Urban Reserve with Agriculture designation. See Exhibit 20. Areawide: Agriculture with Industrial Urban Reserve Overlay. See Exhibit 20.
Zoning	Site 2: Agriculture-20 (AG-20). See Exhibit 22. Areawide: AG-20. See Exhibit 22.
Soils	Site 2: Gee silt loam, Odne silt loam, and Sara silt loam make up the majority of study area soils. About 34% of the area is prime farmland, 11% is prime farmland if drained, for a total of 45%. The rest is either farmland of statewide importance (21%) or not prime farmland (34%).Most soils are Class 3, 4 and 6. See Exhibit 25 and Appendix A. Areawide: Gee silt loam, Odne silt loam, Cove silty clay loam, and Sara silt loam make up most of the areawide soils. About 38% of the soils are prime farmland soils, 19% are prime farmland if drained, 13% are farmland of statewide importance, and 30% are not prime farmland. Most soils are Class 3, 4 and 6. See Exhibit 25 and Appendix A.
Topography	Site 2: Nearly two-thirds of the site area has a slope between 0-8% per NRCS soil data. See Appendix A. Areawide: More than three-quarters of the study area has a slope between 0-8% per NRCS soil data. See Appendix A.
Aerial photography	Site 2: Most of the site is in agricultural use with open land, but there are single family and agricultural structures as well. See Exhibit 22. Areawide: Same as Site 2. See Exhibit 22.
Current Use	Site 2: Agriculture with large majority in current use taxation. A few small parcels in the southeast corner, north, and northeast corner are not in current use taxation. See Exhibit 22. Areawide: Agriculture with more than half of the study area in current use taxation, occurring mainly in the southern study area. See Exhibit 22.

Maps	Comments
Parcel size	Site 2: Variable, with roughly an even amount of small (1-5), medium (5-20) and large parcel sizes (20– 75) interspersed. See Exhibit 21. Areawide: Variable, with roughly more parcels that are between 5-20 acres in areas west and north of site. Larger parcels abut I-5. See Exhibit 21.
Infrastructure: Roads, Sewer, Water	Site 2: There is no water, sewer or freight infrastructure within the site area. I-5 is adjacent to the site area on its eastern border. Sewer and water lines also lie east of 1-5. See Exhibit 23. Areawide: Same as Site 2. See Exhibit 23.
Floodplains	Site 2: Not applicable. Areawide: Not applicable.
Wetlands	Site 2: There are wetlands (NWI) in the southern section of the site. See Exhibit 24. Areawide: There are some wetlands (NWI) in the southern region of the area to the west of the site. See Exhibit 24.
Streams	Site 2: There are riparian and non-riparian habitat conservation areas throughout the site. See Exhibit 24. Areawide: Same as Site 2. See Exhibit 24.
Aquifer Recharge	Site 2: The area is entirely in Category 2 Recharge Areas. See Exhibit 27. Areawide: Same as Site 2. See Exhibit 27.
Geologic Hazards	Site 2: Slopes of 8-20%, 20-30% and 30-50% are found in the study area, along NW 31st Avenue, and NW 289th and NW 299th Streets. Within these steep slope areas are potential areas of erosion and landslide hazard. There are typically very low liquefaction areas. Areawide: Same as Site 2.

Site 2 and Areawide Maps

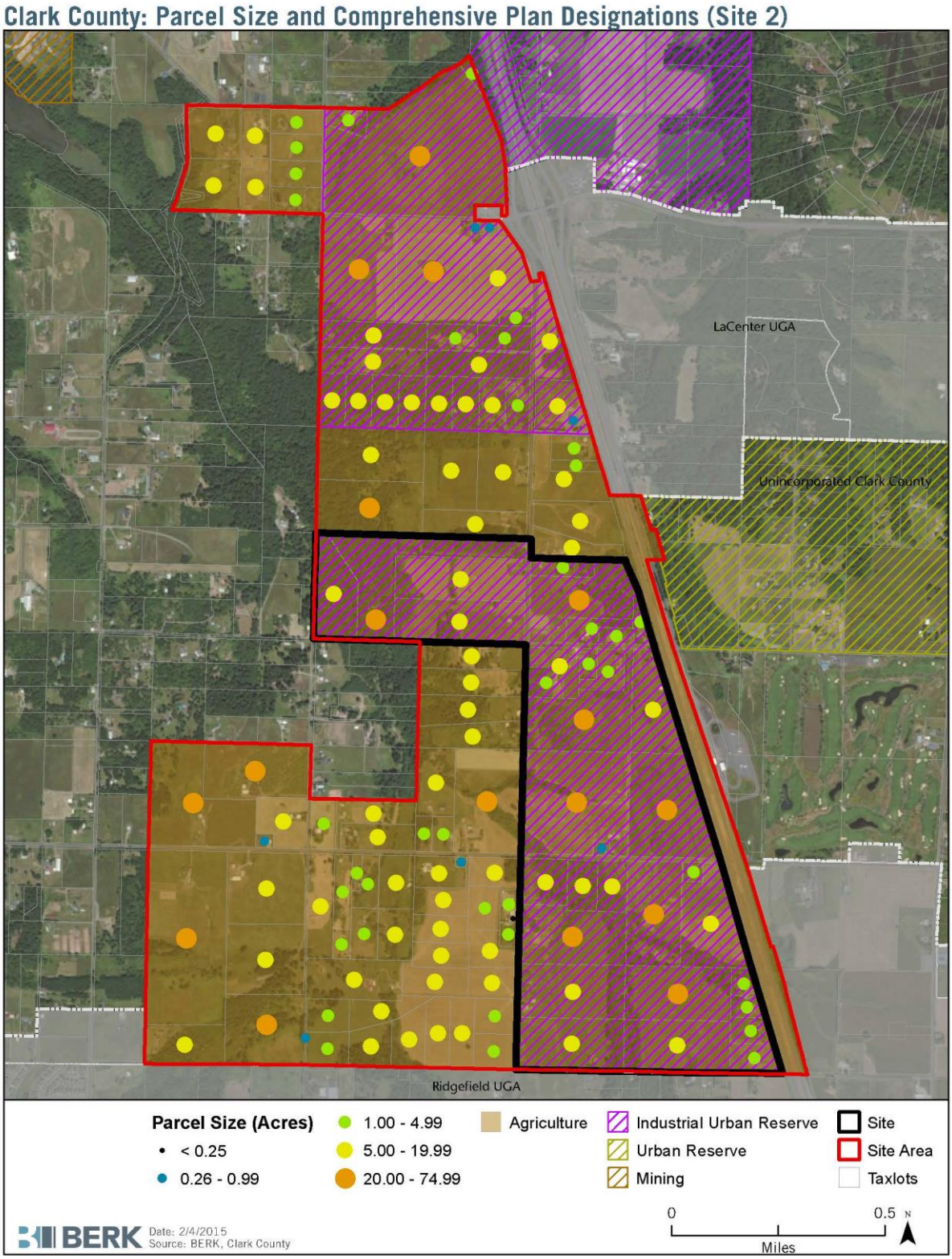
This Section presents maps specific to Site 2 as well as the Areawide Study Area regarding Comprehensive Plan designations, Zoning designations, parcel size, infrastructure, critical areas, soils and capability class, and other relevant topics. These maps are cross-referenced throughout the analysis.

Exhibit 20. Site 2 and Areawide Comprehensive Plan Designation



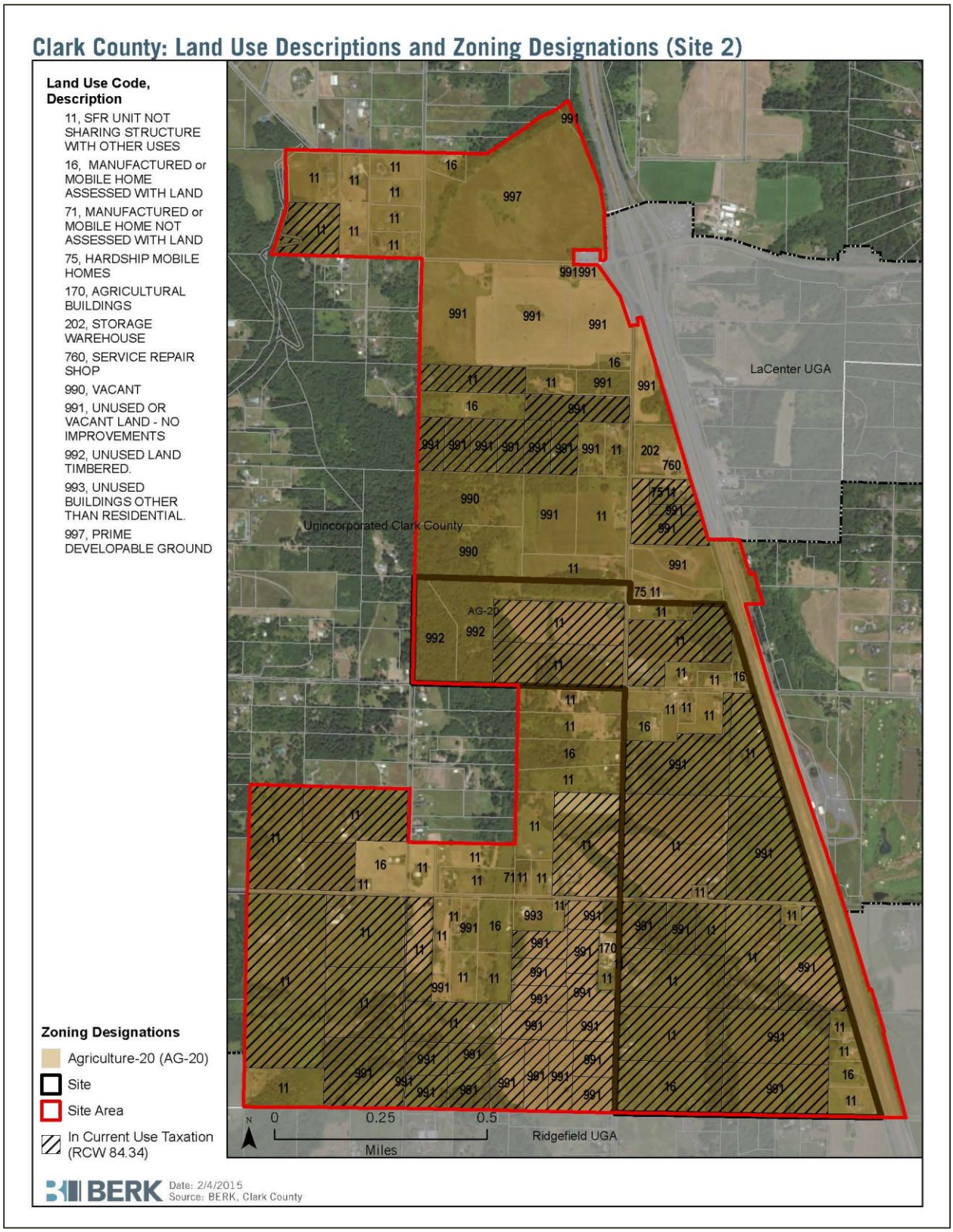
Source: Clark County GIS, BERK Consulting 2015

Exhibit 21. Site 2 and Areawide Comprehensive Plan Designation and Parcel Sizes



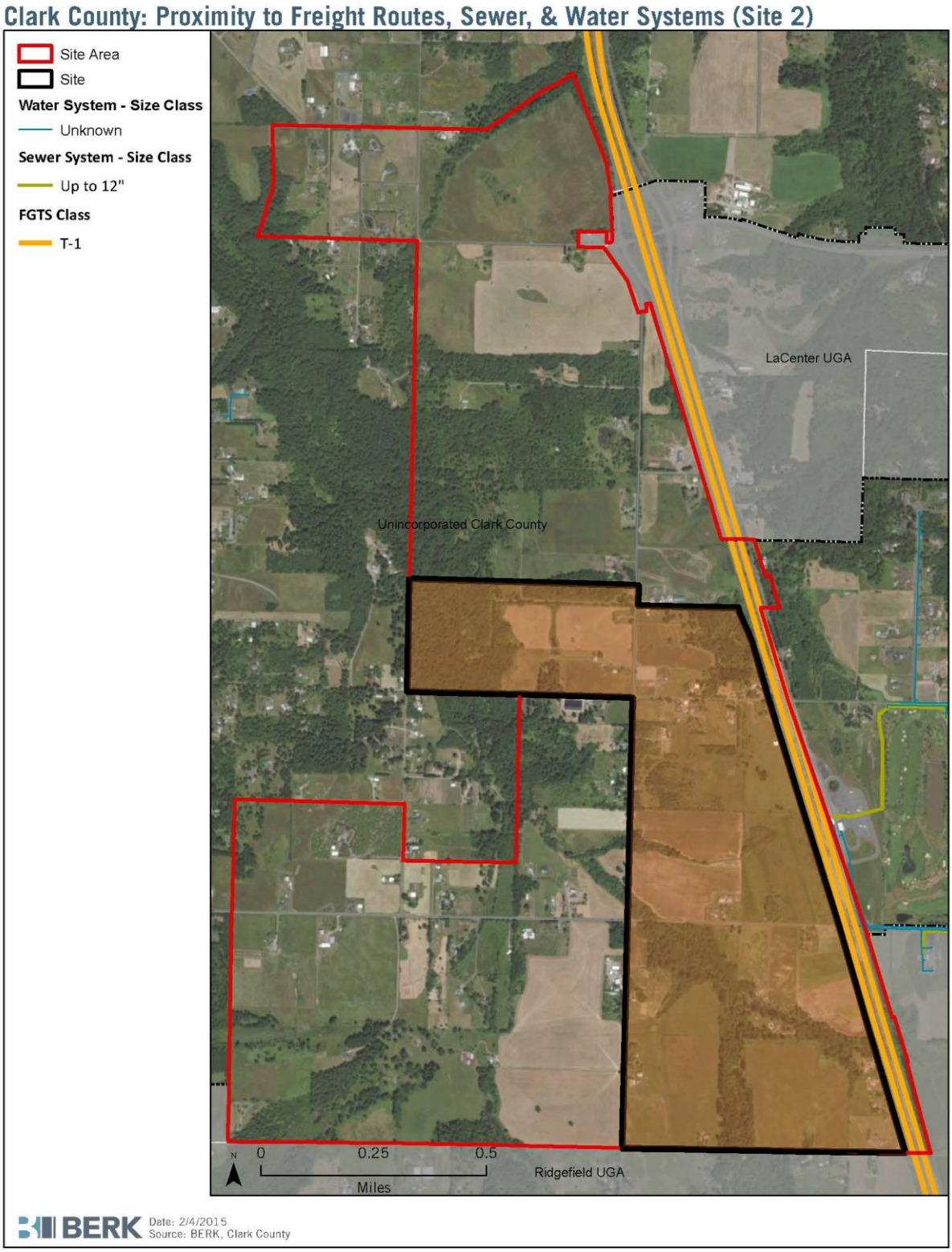
Source: Clark County GIS, BERK Consulting 2015

Exhibit 22. Site 2 and Areawide Current Land Uses and Zoning



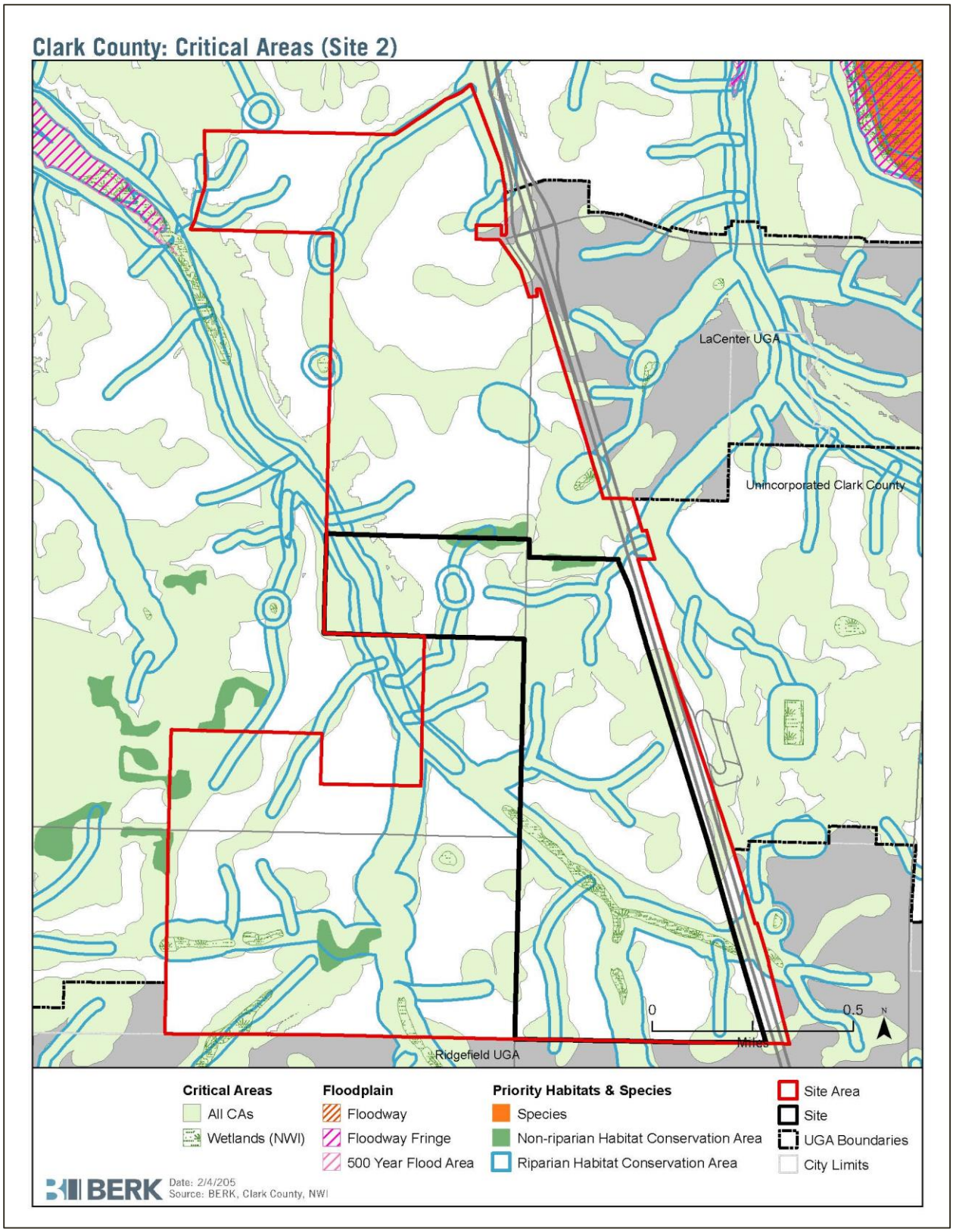
Source: Clark County GIS, BERK Consulting 2015

Exhibit 23. Site 2 and Areawide Proximity of Freight Routes, Water, and Sewer Facilities



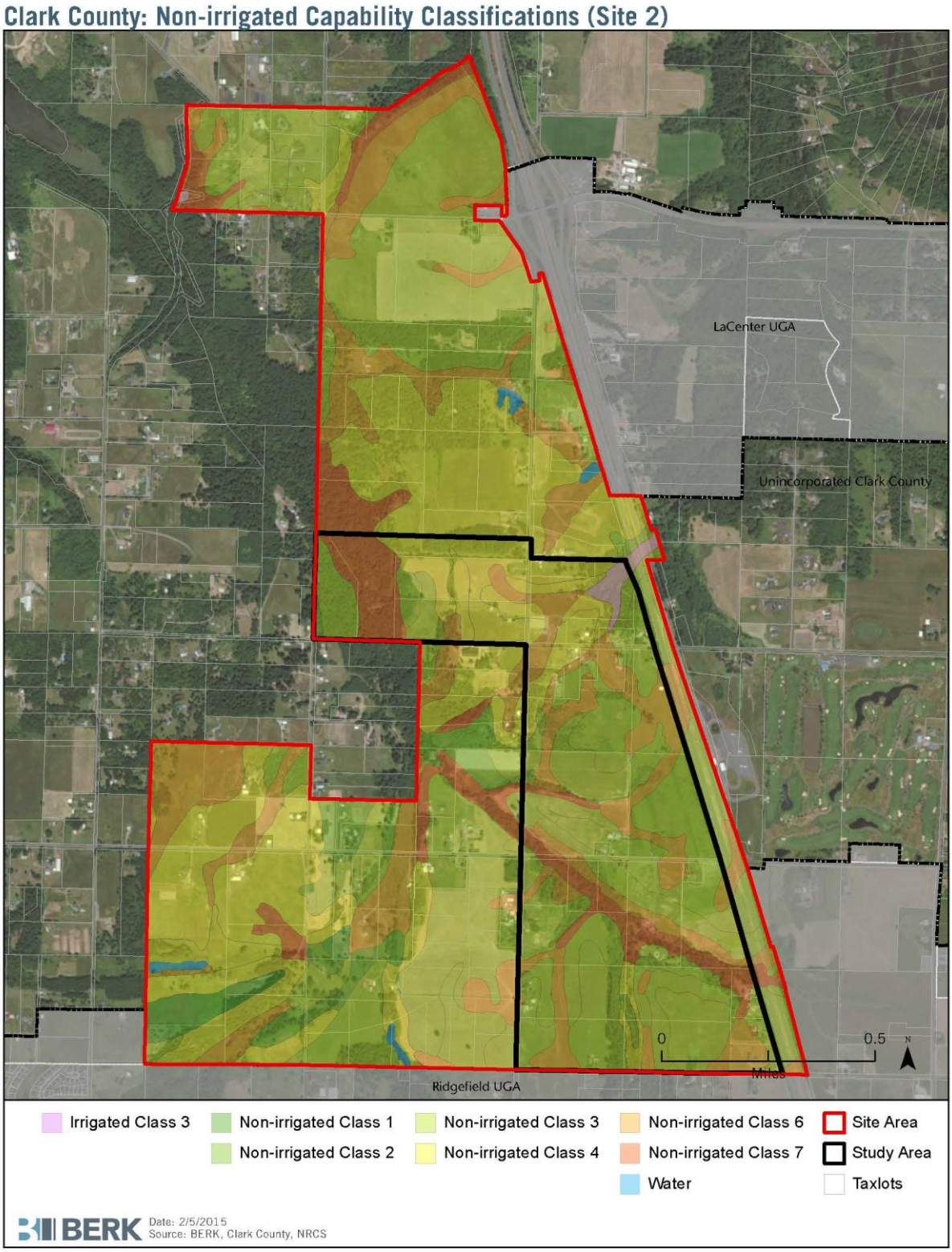
Source: Clark County GIS, BERK Consulting 2015

Exhibit 24. Site 2 and Areawide Mapped Presence of Critical Areas



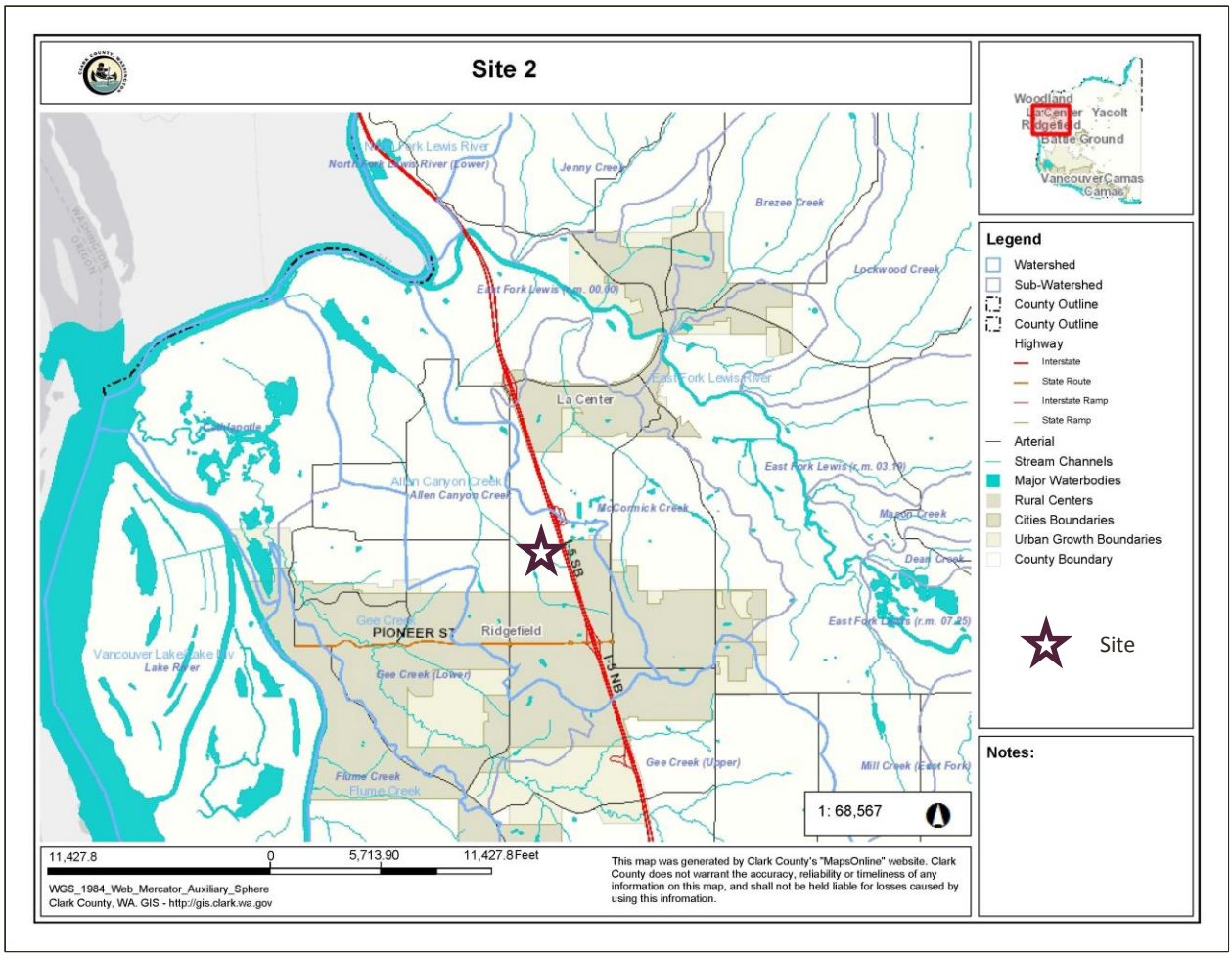
Source: Clark County GIS, BERK Consulting 2015

Exhibit 25. Site 2 and Areawide Docket Soil Capability Classes



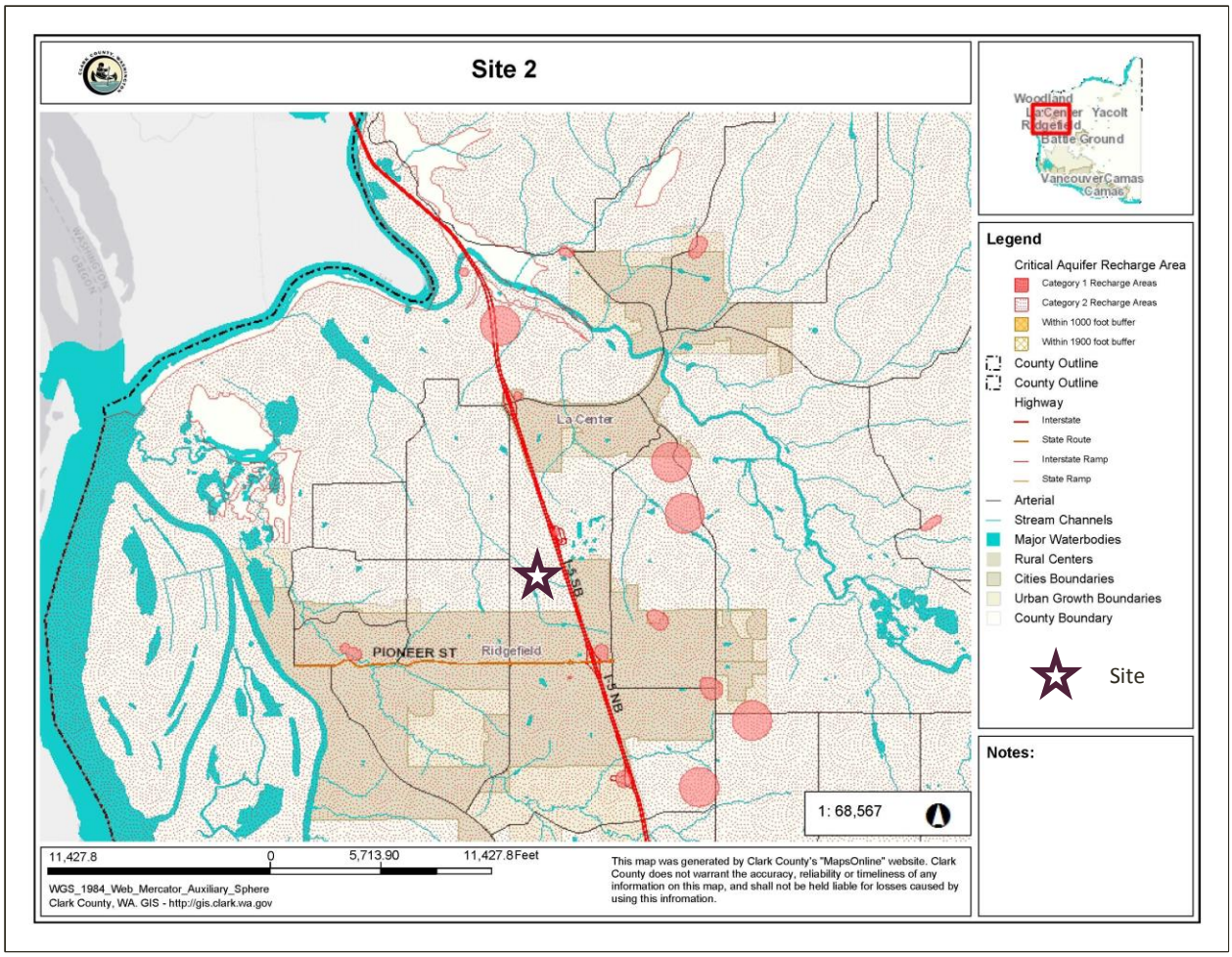
Source: Clark County GIS, BERK Consulting 2015

Exhibit 26. Site 2 and Areawide Vicinity Drainage Basins



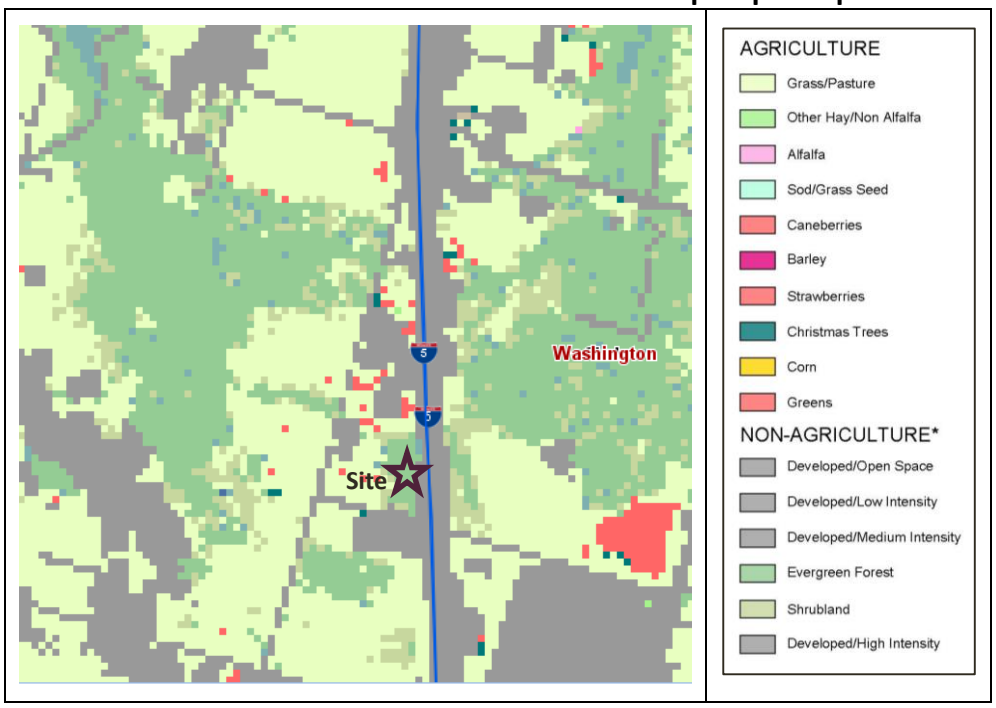
Source: Clark County GIS 2015

Exhibit 27. Site 2 and Areawide Aquifer Classifications in Vicinity



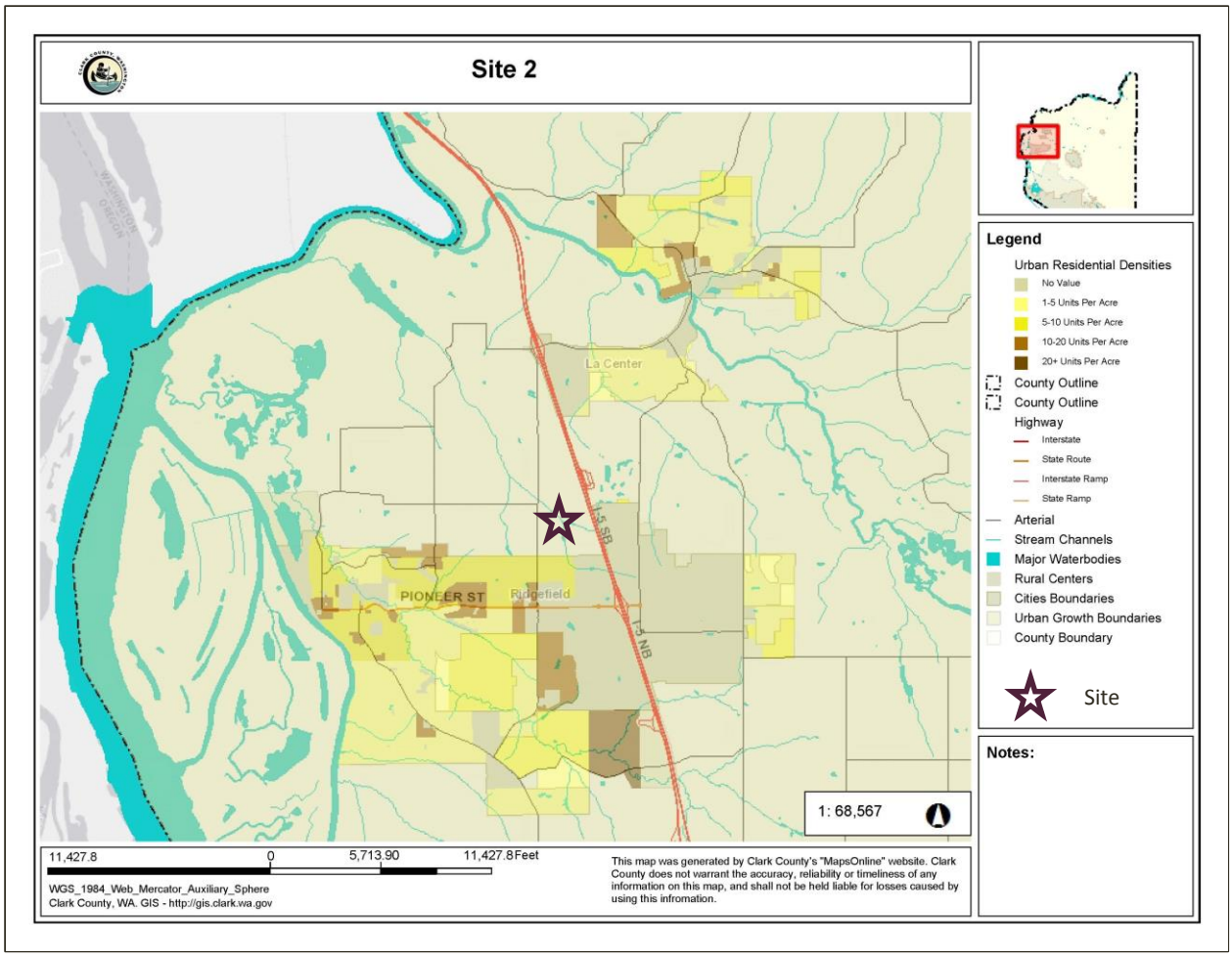
Source: Clark County GIS 2015

Exhibit 28. Site 2 and Areawide USDA CropScape Map



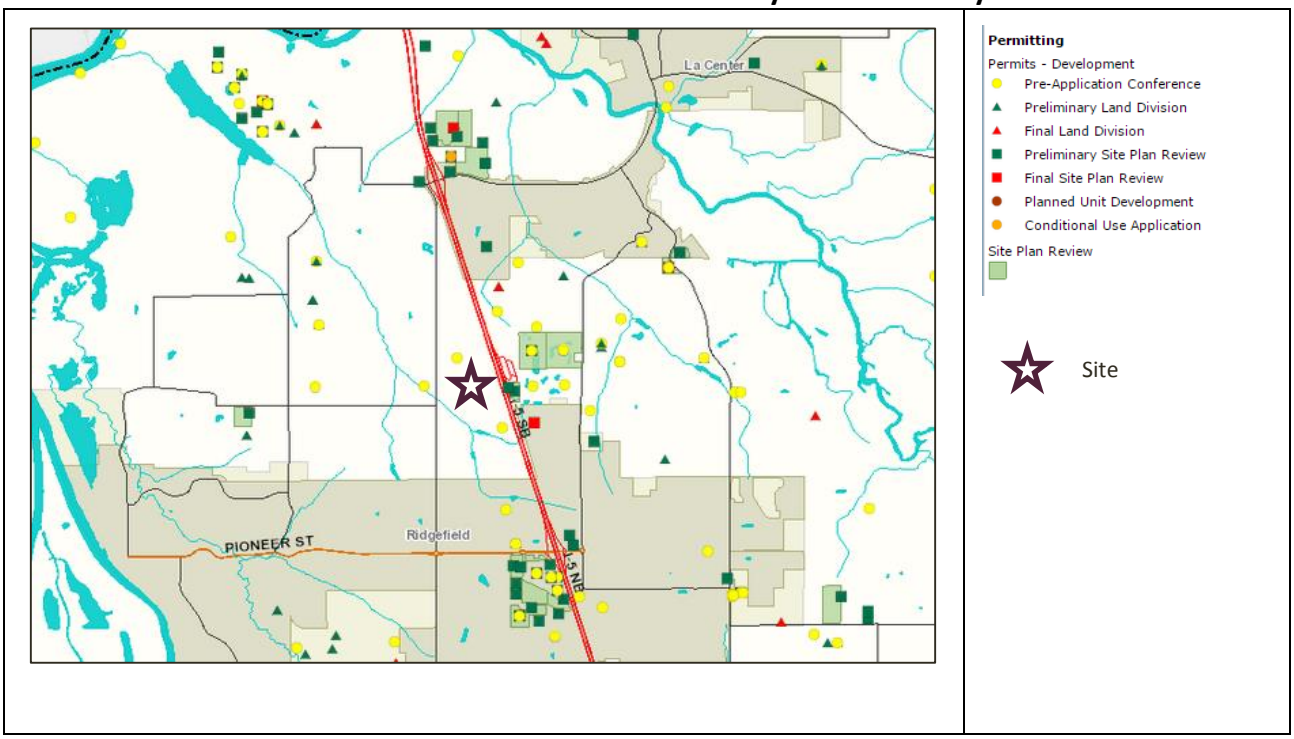
Source: USDA 2014

Exhibit 29. Site 2 and Areawide Nearby Urban Densities



Source: Clark County GIS 2015

Exhibit 30. Site 2 and Areawide Nearby Permit Activity



Source: Clark County GIS 2015

3.3 Agricultural Land Classification Criteria Analysis

This section presents a matrix analysis of how Site 2 and the Areawide Study Area compare to the minimum guidelines to classify agricultural lands in WAC 365-190-050. The matrix in Exhibit 31 compares Site 2 and Areawide Study Area results to the County's 2007 analysis addressing a similar geographic boundary[16]. A summary of the analysis in the matrix is provided in Section 3.4.

Exhibit 31. Matrix: Site 2 and Areawide Study Area Agricultural Land Classification Criteria Analysis

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
A.	(1) In classifying and designating agricultural resource lands, counties must approach the effort as a county-wide or area-wide process. Counties and cities should not review resource lands designations solely on a parcel-by-parcel process. Counties and cities must have a program for the transfer or purchase of development rights prior to designating agricultural resource lands in urban growth areas. Cities are encouraged to coordinate their agricultural resource lands designations with their county and any adjacent jurisdictions.	Conducted as part of Comprehensive Plan Update in 2007. Only a small portion of the Site 2 areawide study area was evaluated – approximately 81.50 acres along N 10th Street extended west of NW 31st Avenue, containing 12 parcels of 0.31-19.74 acres in size.	Areawide analysis is being prepared for four RILB inventory sites including Site 2. See right.	The areawide study area includes Agriculture (Ag) designated land between the UGAs of LaCenter and Ridgefield, including areas abutting Site 2 and generally continuing in all directions until another non-Ag designation abuts, or until the I-5 freeway is reached.
B.	2) Once lands are designated, counties and cities planning under the act must adopt development regulations that assure the conservation of agricultural resource lands. Recommendations for those regulations are found in WAC 365-196-815.	The County has adopted development regulations to conserve agricultural resource lands.	The County has adopted development regulations to conserve agricultural resource lands.	The County has adopted development regulations to conserve agricultural resource lands.

[16] The 2007 Analysis is documented in a May 21, 2007 memo and attachments prepared by Clark County Community Planning, entitled "Bringing Resource Lands into UGAs," and directed to the Board of County Commissioners and Clark County Planning Commission. Available: http://www.clark.wa.gov/planning/RuralLands/taskforce.html. Accessed: October 2014.

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
C.	(3) Lands should be considered for designation as agricultural resource lands based on three factors:			
D.	(a) The land is not already characterized by urban growth. To evaluate this factor, counties and cities should use the criteria contained in WAC 365-196-310.	Rural land uses (open fields, rural residential, forested land, farm buildings).	The Site 2 study area parcels range from 0.26 to 75 acres. The parcels are in agricultural or rural residential use.	The Site 2 areawide parcels range from 0.26 to 75 acres. The majority of parcels range from 20-75 acres in size.
E.	(b) The land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics. Some agricultural operations are less dependent on soil quality than others, including some livestock production operations.	IN COMMERCIAL PRODUCTION? • None of the 12 parcels in this sub area were identified as commercial farms in the Globalwise report maps • 86% in ag/farm current use program CAPABLE? • 47% prime ag soils • 47.19% critical land • hydric soils, riparian habitat, wetland	Nearly all Site 2 is in current use taxation. NRCS soil data show less than half of the land in prime farmland or prime farmland if drained. Capability classes are 3, 4, 6 and 7. According to the NRCS, capability levels are limited for Class 3, and severely and very severely limited for Classes 4 -7. See Appendix A. Stormwater facilities in the form of ditches are found along study area roadways, and it likely the land is drained.	Over half of the study area is in current use taxation for agriculture. The NRCS soil data show over half of the study area is considered prime farmland or prime farmland if drained. Capability classes 1-4 and 6-7 are found in the area, but predominantly Classes 3-4 and 6 which have limitations as described for Site 2 alone. See also Appendix A. Drainage conditions are similar to Site 2 alone.
F.	(i) Lands that are currently used for agricultural production and lands that are capable of such use must be evaluated for designation. The intent of a landowner to use land for agriculture or to cease such use is not the controlling factor in determining if land is used or capable of being used for agricultural production. Land enrolled in federal conservation reserve programs is recommended for designation based on previous agricultural use, management requirements, and potential for reuse as agricultural land.	See Row E above.	Based on current use taxation records nearly all the site is used for agriculture. USDA Crop Scape Data for Site 2 indicate a majority of the site is in grass/pasture, deciduous forest, and cranberries.	Based on current use taxation records it appears over half of the land is used for agriculture. USDA Crop Scape Data show a similar range of crop types as for Site 2.

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
G.	(ii) In determining whether lands are used or capable of being used for agricultural production, counties and cities shall use the land-capability classification system of the United States Department of Agriculture Natural Resources Conservation Service as defined in relevant Field Office Technical Guides. These eight classes are incorporated by the United States Department of Agriculture into map units described in published soil surveys, and are based on the growing capacity, productivity and soil composition of the land	Prime farmland classes considered. Land capability class appears not to have been addressed.	The study area contains capability classes 3, 4, 6 and 7. According to the NRCS, capability levels are limited for Class 3, and severely and very severely limited for Classes 4 and 6. Class 1 0% Class 2 0% Class 3 54% Class 4 16% Class 5 0% Class 6 19% Class 7 10% Water 0% Total 100.0% Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both. Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both. Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat. Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.	The areawide information shows that the area contains Class 1, 2, 3, 4 with some Class 6 and 7 soils. Class 1 1% Class 2 3% Class 3 47% Class 4 23% Class 5 0% Class 6 18% Class 7 7% Water 0% Total 100.0% See Site 2 descriptions plus: Class 1 soils have few limitations that restrict their use. Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.
H.	(c) The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should consider the following nonexclusive criteria, as applicable:			

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
I.	(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service;	47% prime ag soils	About 34% of soils are considered prime farmland and 11% are prime farmland if drained. See Appendix A.	About 38% of soils are considered prime farmland and 19% are prime farmland if drained. See Appendix A.
J.	(ii) The availability of public facilities, including roads used in transporting agricultural products	No information provided	I-5 is adjacent to the site on its east side. It is a designated freight route and a major interstate highway. I-5 carries urban traffic and is not a rural road used primarily for the transport of agricultural productions. NW 289th Street and NW 31st Avenue serving the site are Rural Major Collectors: CCC 40.350.030 defines a Rural Major Collector as follows: "Rural major collector" roads are rural extensions of urban minor arterials and some urban collectors. Their primary purpose is to link rural centers with nearby towns and cities and with state arterial routes. The provision of land access remains subordinate to providing for traffic movement. Parking is not allowed. There are no water or sewer lines within the site area. Sewer lines are planned south of the site in the Ridgefield UGA.[17] Sewer and water lines also lie east of 1-5.	Similar road and infrastructure characteristics as for Site 2 alone. NW 319th Street in the northern extent of the study area is considered a scenic highway. In CCC 40.350.030 Scenic routes are defined as follows: Scenic routes are roadways with unique scenic or historical features, officially designated by the Board of County Commissioners. Scenic routes seek to enhance, preserve and facilitate the enjoyment of those scenic or historical features unique to each route.
K.	(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights;	86% in ag/farm current use program	A majority of the subject property is in the agricultural current use taxation program. Some properties in the northwest and southeast corners are not in the program.	A majority of the parcels in the study area west of the site are in current use taxation. Less than half of the parcels in the study area north of the site are in current use taxation.

[17] See future pump station, force main F-4 and gravity line T-10: http://www.crwwd.com/ridgefield/docs/RidgefieldCollectionMap.pdf.

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
L.	(iv) The availability of public services;	No information provided	The land is in the Clark County Fire & Rescue district and in the Ridgefield School District Boundary. The site is patrolled by the Clark County Sheriff's West district.	Same as for Site 2 alone.
M.	(v) Relationship or proximity to urban growth areas;	Directly adjacent to Ridgefield's Northern UGA boundary	The site is adjacent to the north boundary of the Ridgefield UGA and is close to the west boundary of the LaCenter UGA.	Same as for Site 2 alone.
N.	(vi) Predominant parcel size;	Range: 0.31-19.74 acres Median parcel size: 6.79 acres	The property contains parcels of 0.26 to 75 acres.	The property contains parcels of 0.26 to 75 acres. There is one parcel in the area west of the site that is under 0.25 acres in size.
O.	(vii) Land use settlement patterns and their compatibility with agricultural practices;	Rural land uses (open fields, rural residential, forested land, farm buildings)	The property is generally open in character, except for the agricultural related buildings and some homes. UGA territory is to the south.	The study area north of the site is generally open and has few agricultural and residential structures. Structures are concentrated in the northwest corner of the study area. The study area west of the site has more concentration of agricultural and residential structures in the parcels that are not in the current use taxation program.
P.	(viii) Intensity of nearby land uses;	More intense land uses are located within Ridgefield's UGA, south and SW of sub area. AG-20 zoning to the North and NE.	Densities within the Ridgefield UGA are generally 5-10 units per acre.	Same as for Site 2. Additionally uses in LaCenter are up to 5 units per acre on average.
Q.	(ix) History of land development permits issued nearby;	No urban development permits proposed in the vicinity of the subarea.	Some pre-application permits are recorded in the study area. Most permits are addressed in the Ridgefield and LaCenter UGAs.	Same as for Site 2.

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
R.	(x) Land values under alternative uses; and	AG-20: $16 /acre Proposed zoning: R-12: $195/acre	Land that is in current use assessment is taxed at below its market value typically at less than half. Some parcels in Site 2 that are 20 acres and in current use assessment show the following (higher values are properties with structures): Market Value: $251,548.00 Taxable Value $19,651.0 Market Value: $345,204.00 Taxable Value $118,126.00 Market Value: $398,310.00 Taxable Value: $156,227.00 Market Value: $272,001.00 Taxable Value: $6,433.00	Same as for Site 2.
S.	(xi) Proximity to markets.	Adjacent to Ridgefield UGA.	The site is adjacent to the north boundary of the Ridgefield UGA and is close to the west boundary of the LaCenter UGA.	Same as for Site 2 alone.
T.	(4) When designating agricultural resource lands, counties and cities may consider food security issues, which may include providing local food supplies for food banks, schools and institutions, vocational training opportunities in agricultural operations, and preserving heritage or artisanal foods.		In Clark County the number of small farms has been increasing over time, and represents more intensive, value-added, urban-oriented farming.[18] USDA Crop Scape indicates land is in grass/pasture, deciduous forest, and cranberries. The Washington State Department of Agriculture (WSDA) database	Similar analysis as for Site 2.

[18] BERK. 2012. Clark County Rural Lands Study. Available: http://www.clark.wa.gov/planning/rurallands/index.html.

<table>
<tr><th></th><th>WAC 365-190-050 Criteria</th><th>2007 Analysis: Site 2</th><th>2015 Analysis: Site 2</th><th>2015 Analysis: Site 2 Areawide</th></tr>
<tr><td></td><td></td><td></td><td>at the section scale shows a predominance of hay/silage.
The WSU Farm Locator indicates there is a tree farm in the study area: Finn Family Tree Farm.</td><td></td></tr>
<tr><td>U.</td><td>(5) When applying the criteria in subsection (3)(c) of this section, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities.</td><td></td><td>See Exhibit 17, row U.
Relevant to Site 2 are statistics related to hay and tree farms.
Hay and forage land represents the top cropland in acres in the County, 17,541 acres of 74,758 acres in farms. The number of farms with crops and hay shows an increase between 2002 and 2007 and a more recent decline in 2012:
Similarly the planting of Christmas tree and other short term tree crops increased between 2002 and 2007 and declined in 2012.
<table>
<tr><th></th><th>1997</th><th>2002</th><th>2007</th><th>2012</th></tr>
<tr><td>Crops & Hay</td><td>-</td><td>284</td><td>429</td><td>368</td></tr>
<tr><td>Cut Christmas trees</td><td>-</td><td>46</td><td>69</td><td>58</td></tr>
</table></td><td></td></tr>
<tr><td>V.</td><td>(6) Counties and cities may further classify additional agricultural lands of local importance. Classifying additional agricultural lands of local importance should include, in addition to general public involvement, consultation with the board of the local conservation district</td><td></td><td>The County has not designated agricultural land of local importance. This is an optional policy choice.</td><td>Same as for Site 2.</td></tr>
</table>

	WAC 365-190-050 Criteria	2007 Analysis: Site 2	2015 Analysis: Site 2	2015 Analysis: Site 2 Areawide
	and the local committee of the farm service agency. It may also be useful to consult with any existing local organizations marketing or using local produce, including the boards of local farmers markets, school districts, other large institutions, such as hospitals, correctional facilities, or existing food cooperatives. These additional lands may include designated critical areas, such as bogs used to grow cranberries or farmed wetlands. Where these lands are also designated critical areas, counties and cities planning under the act must weigh the compatibility of adjacent land uses and development with the continuing need to protect the functions and values of critical areas and ecosystems.			

3.4 Summary and Conclusions

Site 2

Site 2 is zoned and used for agriculture but contain less than a majority of prime farmland soils. Parcels are moderate to relatively large in size with most between 5-75 acres. The long-term trend is of decline in large and mid-size operations, and rather an increase in small farms oriented to the urban, local food movement.

The agricultural market is showing an increase in small value added production and direct sales, CSAs, and other newer local food trends. The subject properties include tree and hay/silage operations. The sale of products locally is probable for tree farms.

The subject sites are in proximity of urban uses at urban densities; however, urban services and infrastructure are not immediately abutting. Aside from I-5 a limited access roadways, remaining roads are rural in character with Rural Major Collector and Scenic Highway designations by the County.

Site 2 is predominantly under current use taxation, and thus the effect of growth pressures is not felt fiscally. The value of the land under urban uses would be greater.

The RILB Inventory (BERK Consulting et al. September 2015, under separate cover) shows the property meets initial screening criteria to be considered a RILB.

If the property were to convert it would reduce the acres and number of farms consistent with long-term County trends.

Areawide

The areawide analysis is similar in terms of overall land use characteristics and location near services and infrastructure as for Site 2 alone. However, less of the boundary is in current use taxation, though a greater percent contains prime farmland soil.

4.0 SITE 3 AND AREAWIDE STUDY AREA

4.1 Study Area Description

This evaluation addresses Site 3 and an area similarly designated and zoned surrounding Site 3 south of Ridgefield. See Exhibit 32.

Exhibit 32. Site 3 and Areawide Study Area Description

Description	Comments
Site 3: North Vancouver Freeway	The site is about 764 acres and lies on either side of I-5 at SR 502 (NE 219th Street).
Areawide Analysis: AG-20 Zoning in Vicinity of Site 3	The areawide study area includes 2,109 acres of Agriculture (Ag) designations between the UGAs of Ridgefield and Vancouver, including areas abutting Site 3 and generally continuing north, east, south, and west until another non-Ag designation abuts, or until the contiguous Ag pattern changes. The Ag designations are not contiguous in the study area; rural designations are more predominant in the central study area and split the two areas of Ag designation.

4.2 Maps Reviewed

A series of maps were reviewed as described in Exhibit 33 in order to conduct the Site 3 and Areawide analysis of agricultural land designation criteria in Section 4.3.

Exhibit 33. Maps Reviewed: Site 3 and Areawide Study Area

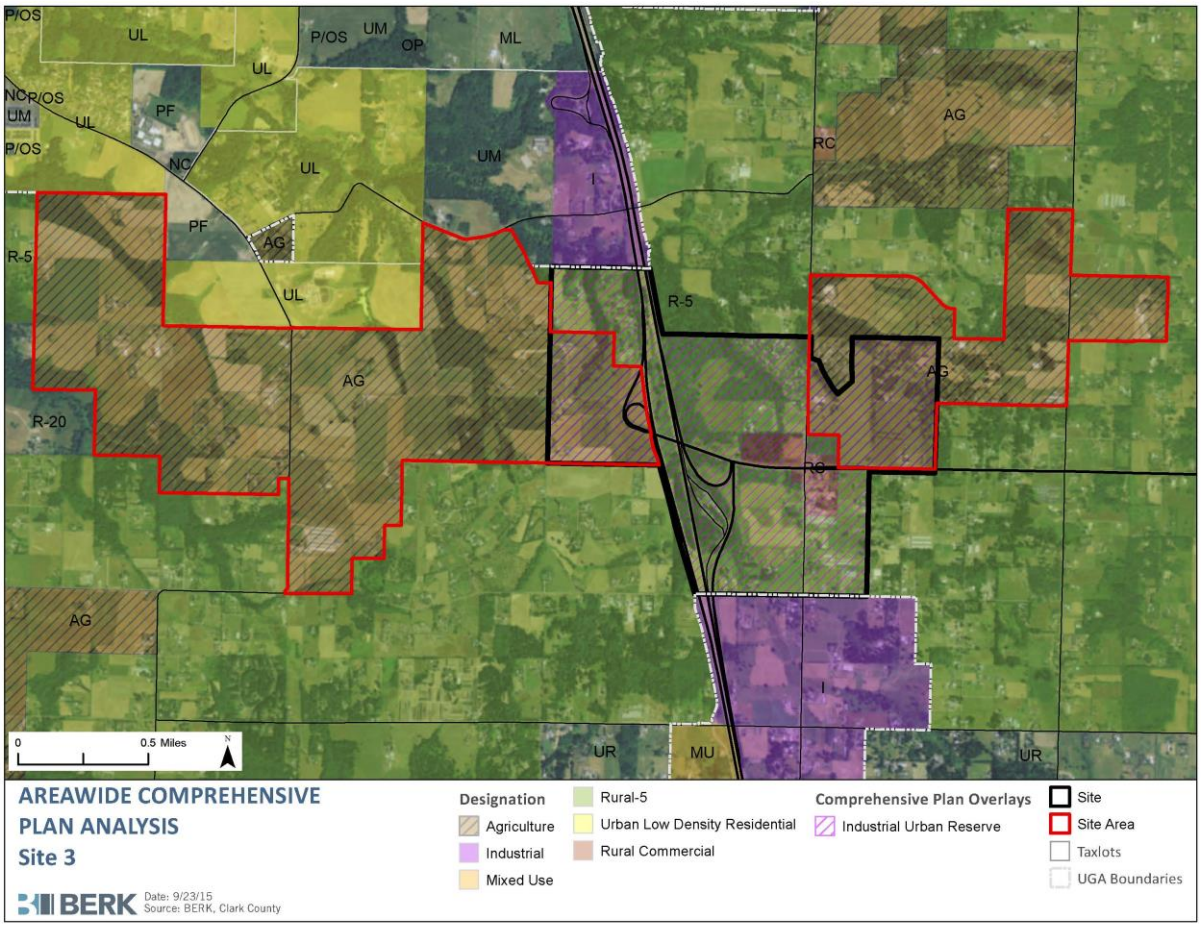
Maps	Comments
Comprehensive Plan	Site 3: Site is fully in Industrial Urban Reserve with Rural Commercial, Rural-5, and Agriculture designations. See Exhibit 34. Areawide: Same as Site 3 with added areas of Agriculture. See Exhibit 34.
Zoning	Site 3: Agriculture-20 (AG-20), Rural Commercial – Outside Rural Center (CR-1), and Rural-5 (R-5). See Exhibit 36. Areawide: Same as Site 3 with added AG-20 zoning. See Exhibit 36.
Soils	Site 3: Gee silt loam (0-8%) and Odne silt loam (0-5%) make up more than two-thirds of the study area soils. About 55% of the soils is considered prime farmland and 4% is prime farmland if drained. About 12% is farmland of statewide importance, and 29% is not prime farmland. Farmland classes are largely Classes 3, 4 and 6 with small areas of Classes 1 and 2. See Exhibit 39 and Appendix A. Areawide: Nearly half of the soils are Gee silt loam (0-8%), and Odne Silt Loam (0-5%) is the next largest share. The area contains 48% prime farmland, 3% prime farmland if drained, 20% farmland of statewide importance, and 28% not prime farmland. Farmland classes are predominantly Classes 3, 4 and 6 and small amounts of Classes 1, 2, and 7.
Topography	Site 3: Generally flat with more than three-quarters of the land with 0-8% slope. See Appendix A. Areawide: More than two thirds of the soils are 0-8% slopes.
Aerial photography	Site 3: See Exhibit 36. Most of the land includes single family homes and open fields. Areawide: See Exhibit 36. Most of the land includes open fields and residences.
Current Use	Site 3: Residential uses and open land with less than have in current use taxation. See Exhibit 34 and Exhibit 36. Areawide: Agriculture with majority of parcels in current use taxation in study areas to the west and east of the site. See Exhibit 34 and Exhibit 36.

Maps	Comments
Parcel size	Site 3: Variable, with parcels from less than 0.26 to 75 acres in size. A majority of parcels are 1-5 acres in size and one parcel is between 20-75 acres in size .See Exhibit 35. Areawide: Variable, with parcels from 0.26 to 100 acres. Majority of study area are between 20-75 acres and one parcel is between 75-100 acres. See Exhibit 35.
Infrastructure: Roads, Sewer, Water	Site 3: I-5 runs north and south within the western portion of the site area. I-5 and SR 502/ NE 219th Street are designated freight routes. WA State Route 502 runs east and west through the middle of the site and connects with I-5 near the eastern border of the site. Water lines traverse the site area. Sewer lines are further south in the Vancouver UGA or further northwest in the Ridgefield UGA. See Exhibit 37. Areawide: There are a few water lines that run north and south through the study area east of the site. See Exhibit 37.
Floodplains	Site 3: There is floodway and floodway fringe area associated with Gee Creek running north and south through the western section of the site parallel to I-5. Areawide: Same as Site 3.
Wetlands	Site 3: Wetlands are mapped along Gee Creek that runs parallel to I-5. See Exhibit 38. Areawide: Wetlands are mapped study area to the west of the site near the southwest borders and to the east of the site. See Exhibit 38.
Streams	Site 3: Gee Creek and tributaries traverse the site. Areawide: Streams are found throughout the study area including Flume Creek and tributaries and Gee Creek and tributaries in Site 3. See Exhibit 38.
Aquifer Recharge	Site 3: Lies in a Category 2 Recharge Areas. See Exhibit 41. Areawide: Same as Site 3. See Exhibit 41.
Geologic Hazards	Site 3: Steep slopes predominate particularly west of I-5 along watercourses; see soil types with slopes 8% and greater in Appendix A. Areawide: Same as Site 3.

Site 3 and Areawide Maps

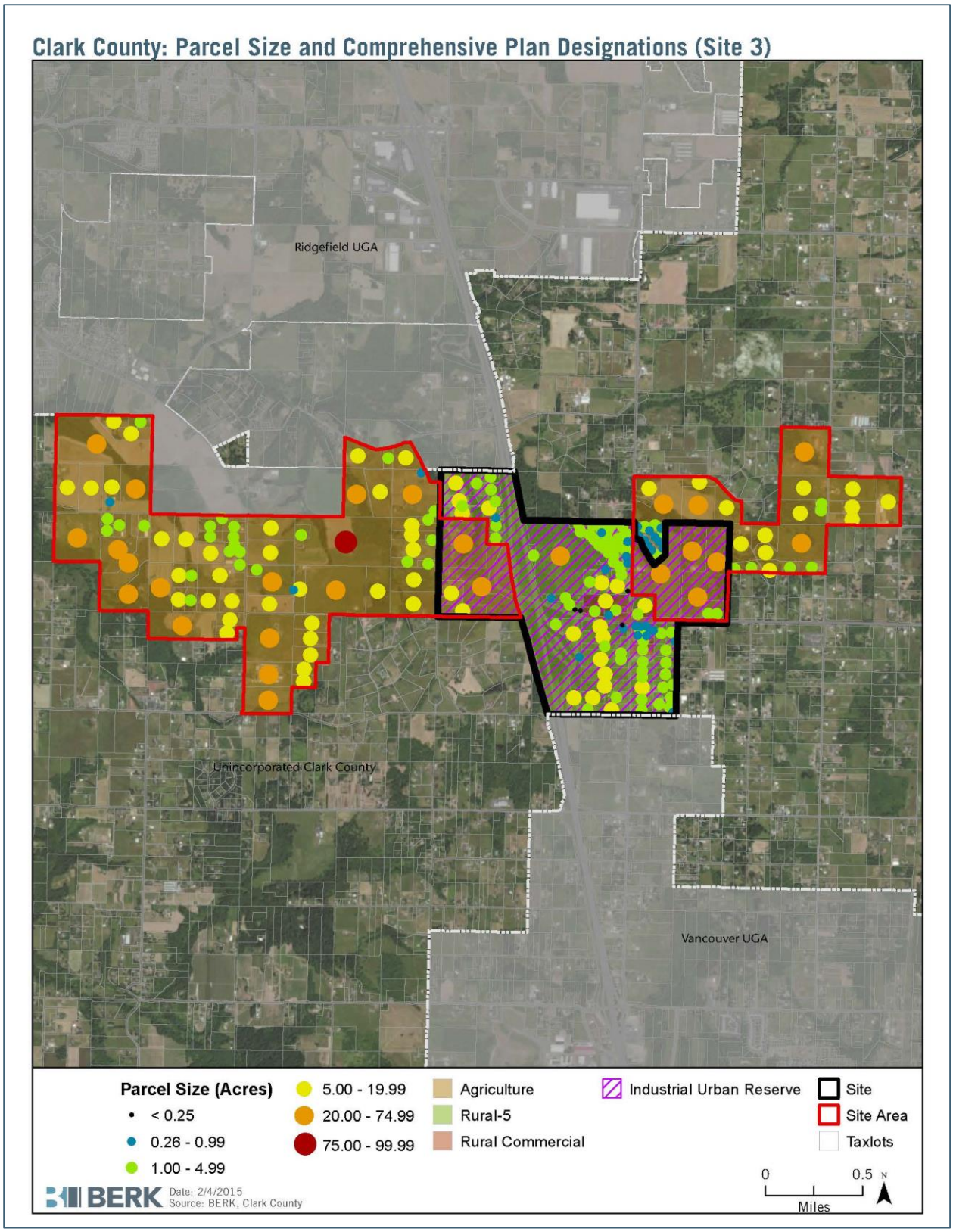
This Section presents maps specific to Site 3 as well as the Areawide Study Area regarding Comprehensive Plan designations, Zoning designations, parcel size, infrastructure, critical areas, soils and capability class, and other relevant topics. These maps are cross-referenced throughout the analysis.

Exhibit 34. Site 3 and Areawide Comprehensive Plan Designation



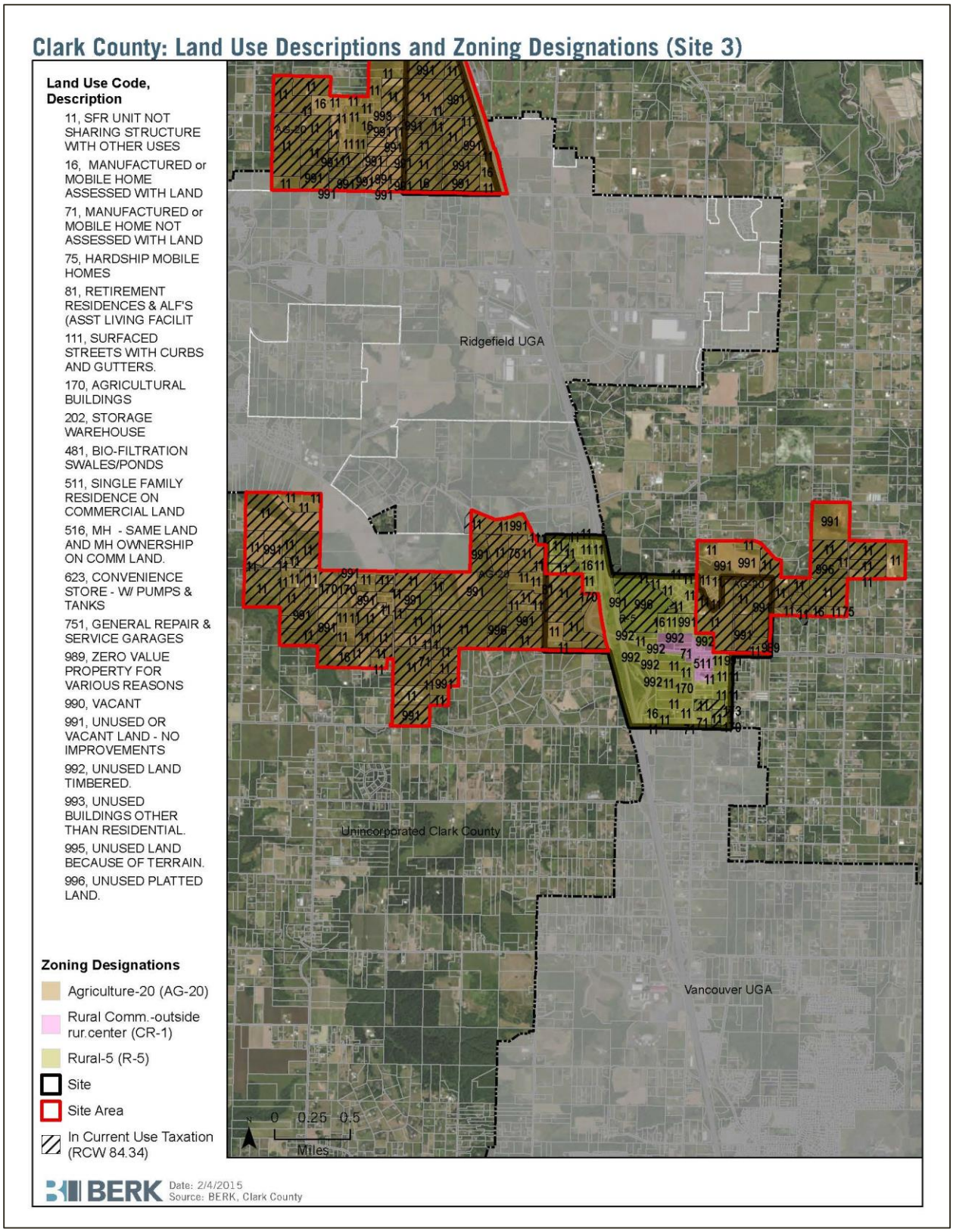
Source: Clark County GIS, BERK Consulting 2015

Exhibit 35. Site 3 and Areawide Comprehensive Plan Designation and Parcel Sizes



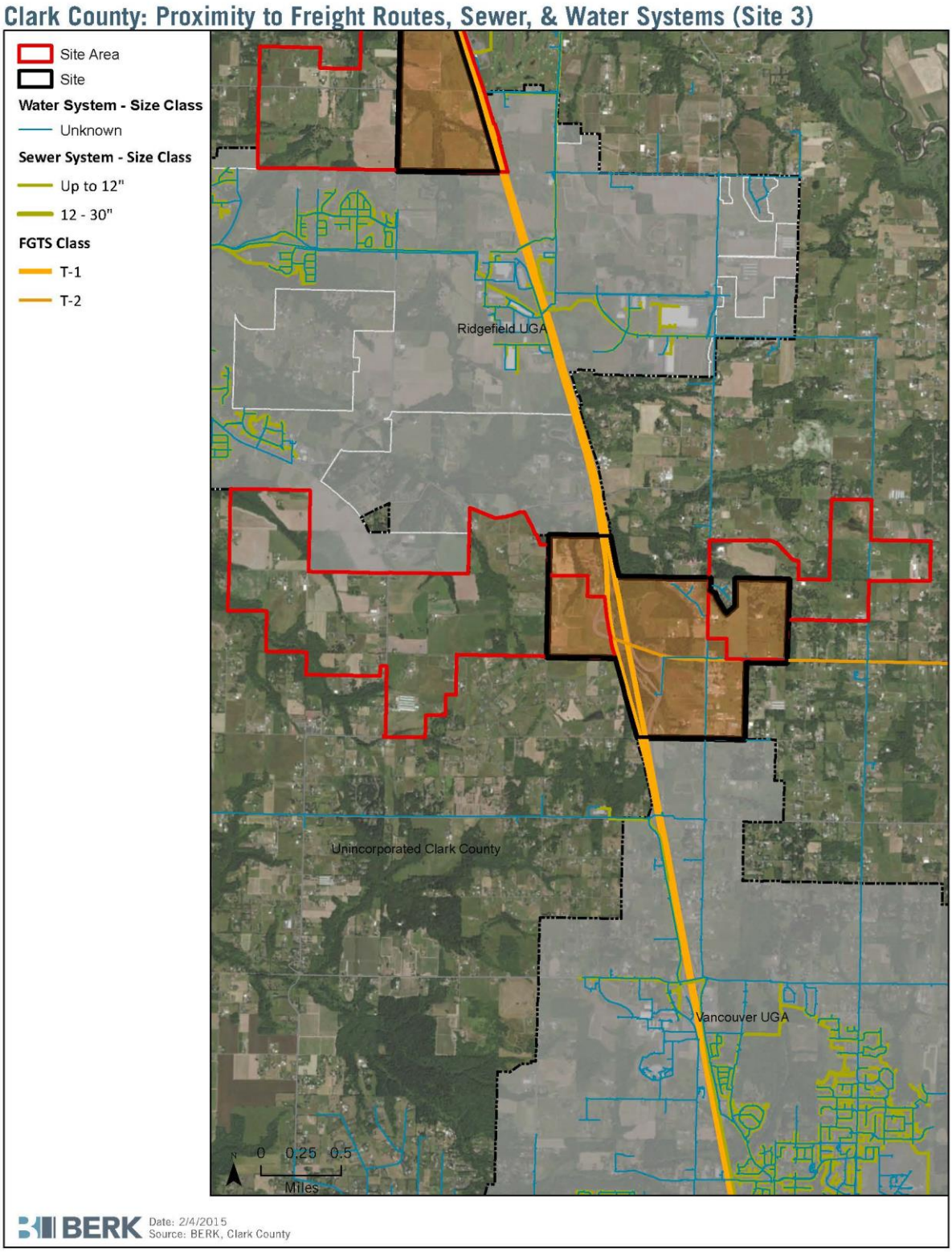
Source: Clark County GIS, BERK Consulting 2015

Exhibit 36. Site 3 and Areawide Current Land Uses and Zoning



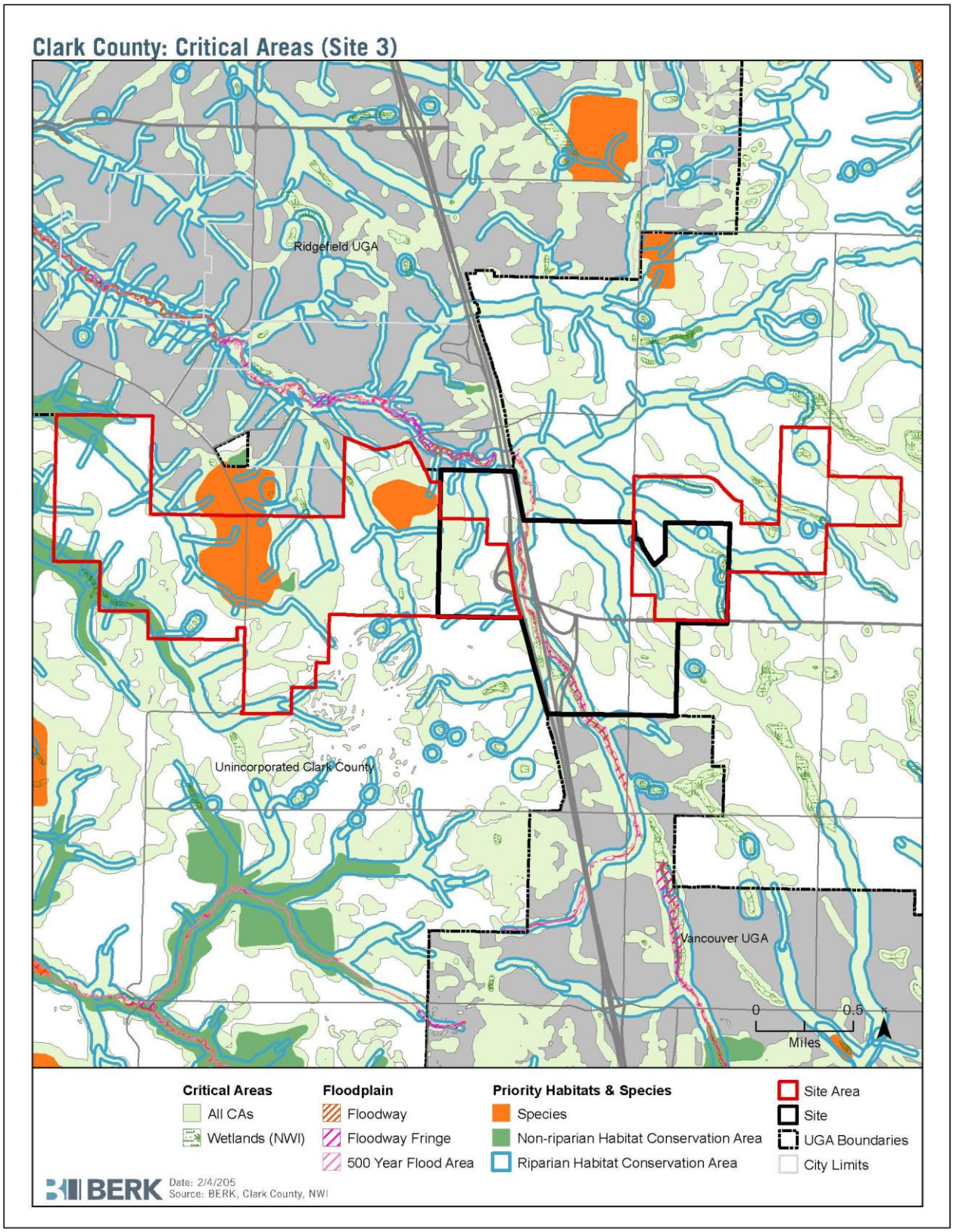
Source: Clark County GIS, BERK Consulting 2015

Exhibit 37. Site 3 and Areawide Proximity of Freight Routes, Water, and Sewer Facilities



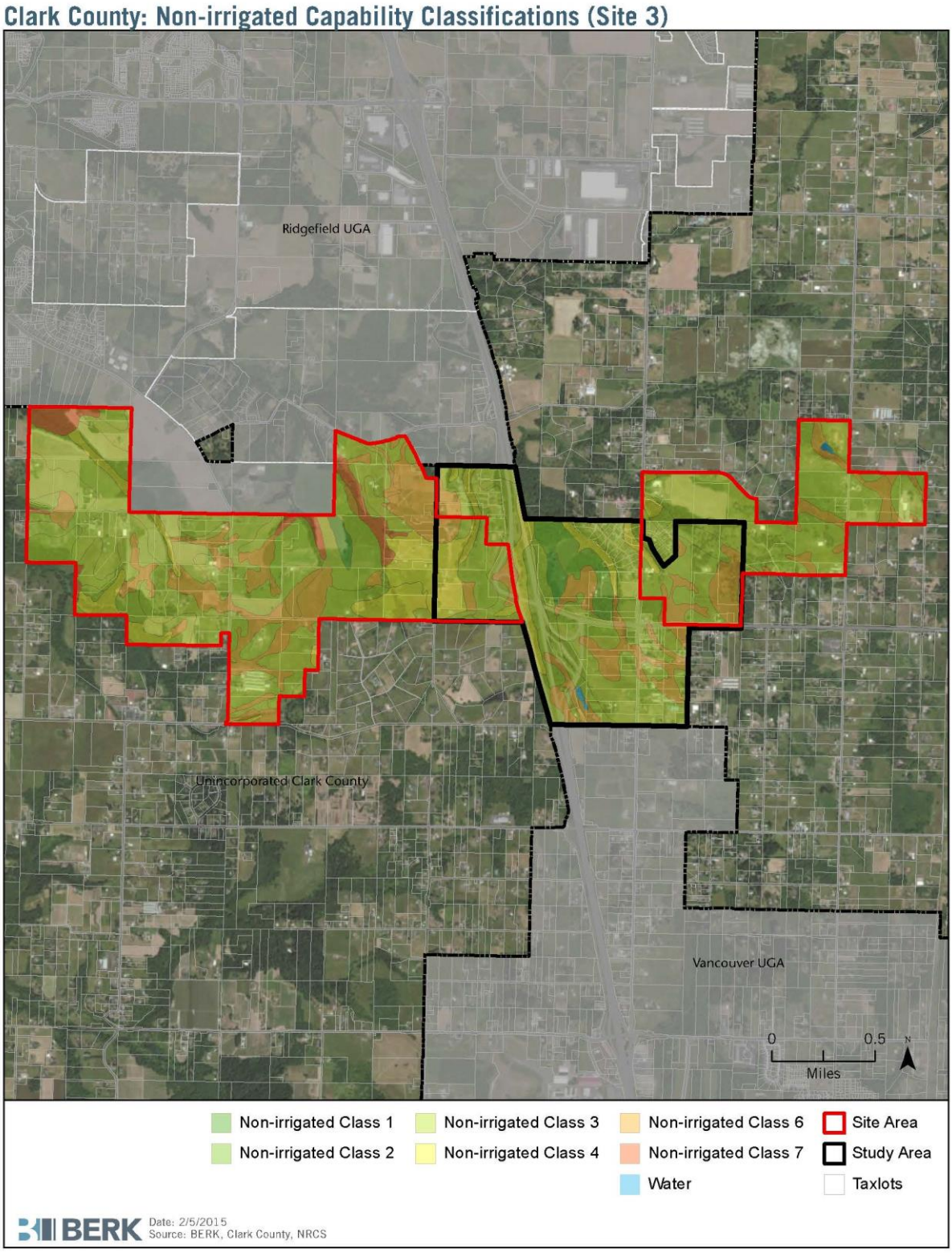
Source: Clark County GIS, BERK Consulting 2015

Exhibit 38. Site 3 and Areawide Mapped Presence of Critical Areas



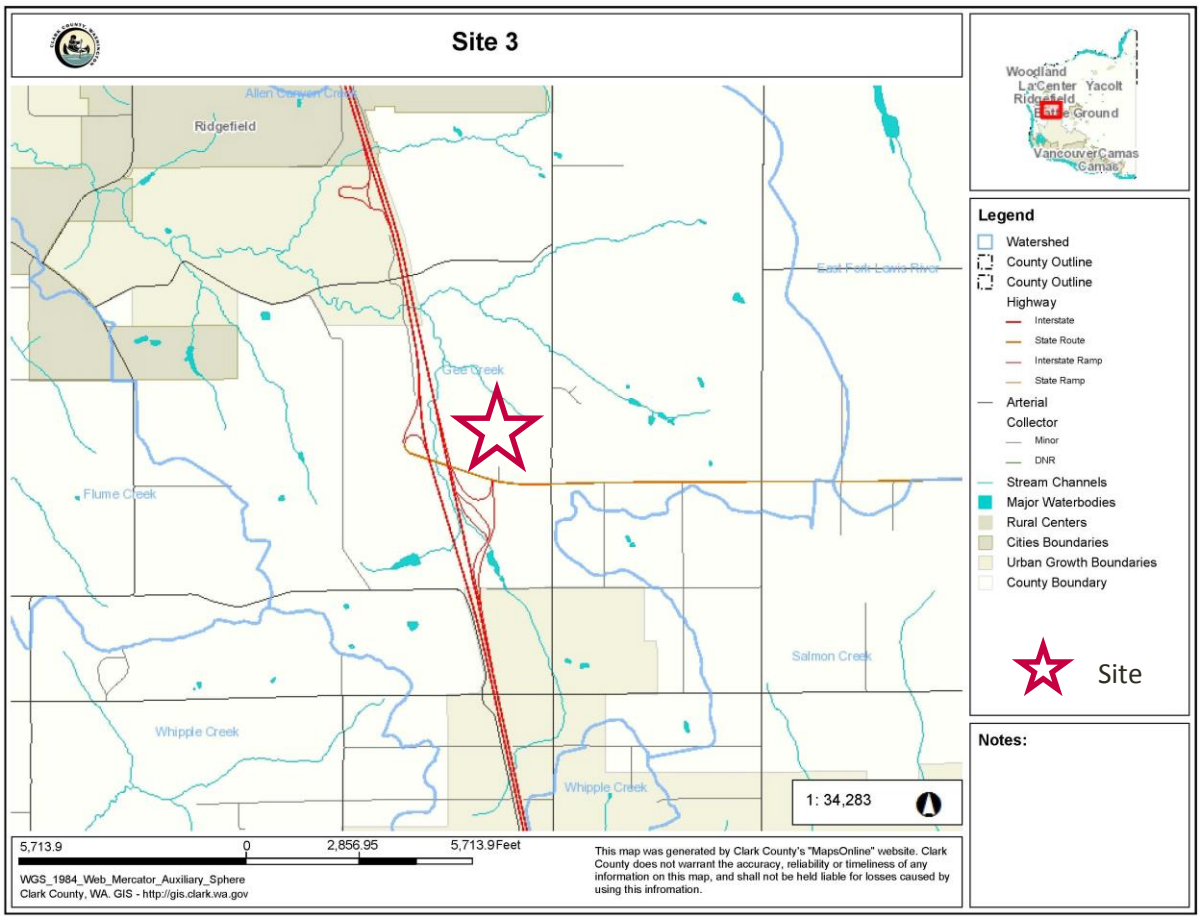
Source: Clark County GIS, BERK Consulting 2015

Exhibit 39. Site 3 and Areawide Docket Soil Capability Classes



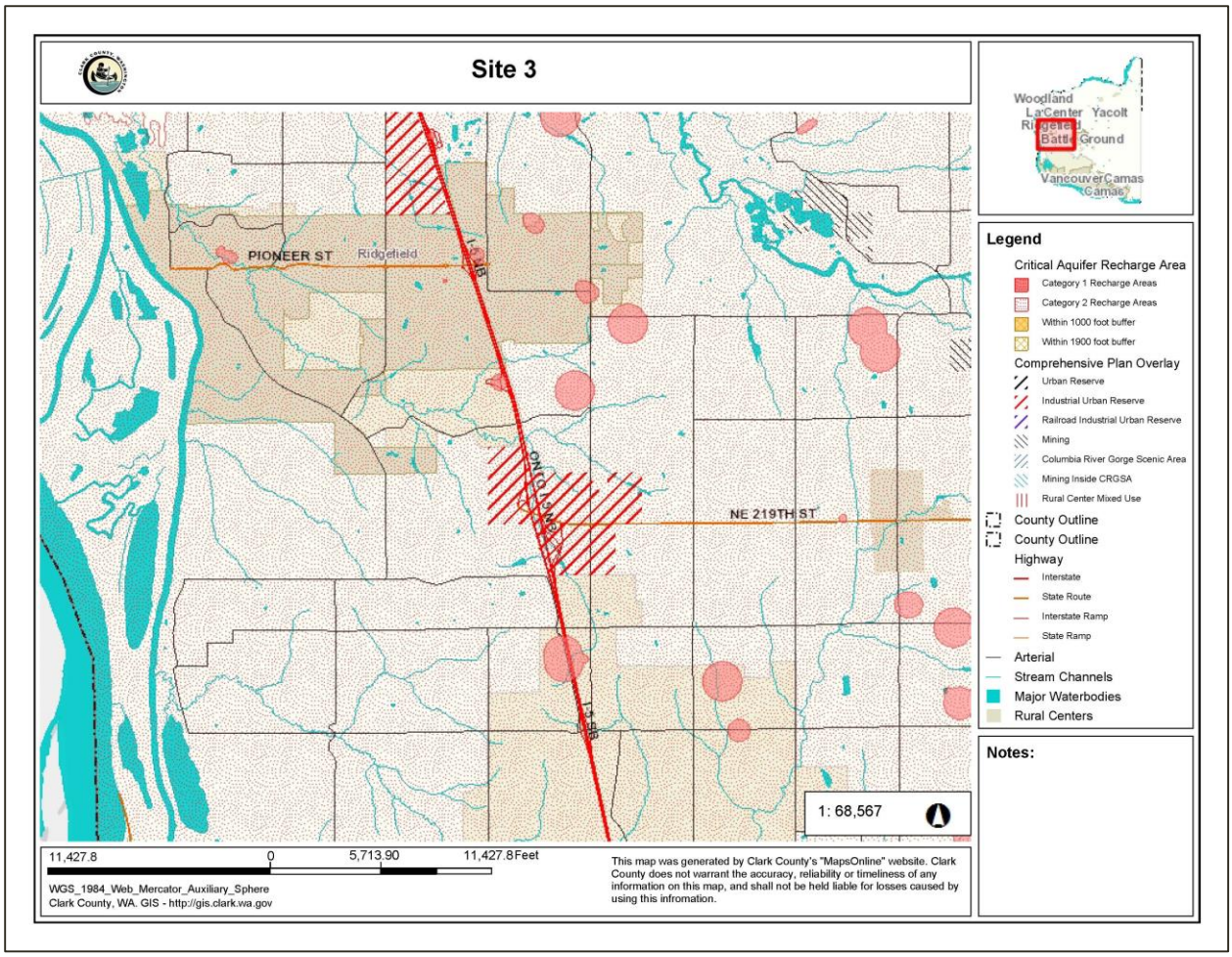
Source: Clark County GIS, BERK Consulting 2015

Exhibit 40. Site 3 and Areawide Vicinity Drainage Basins



Source: Clark County GIS 2015

Exhibit 41. Site 3 and Areawide Aquifer Classifications in Vicinity

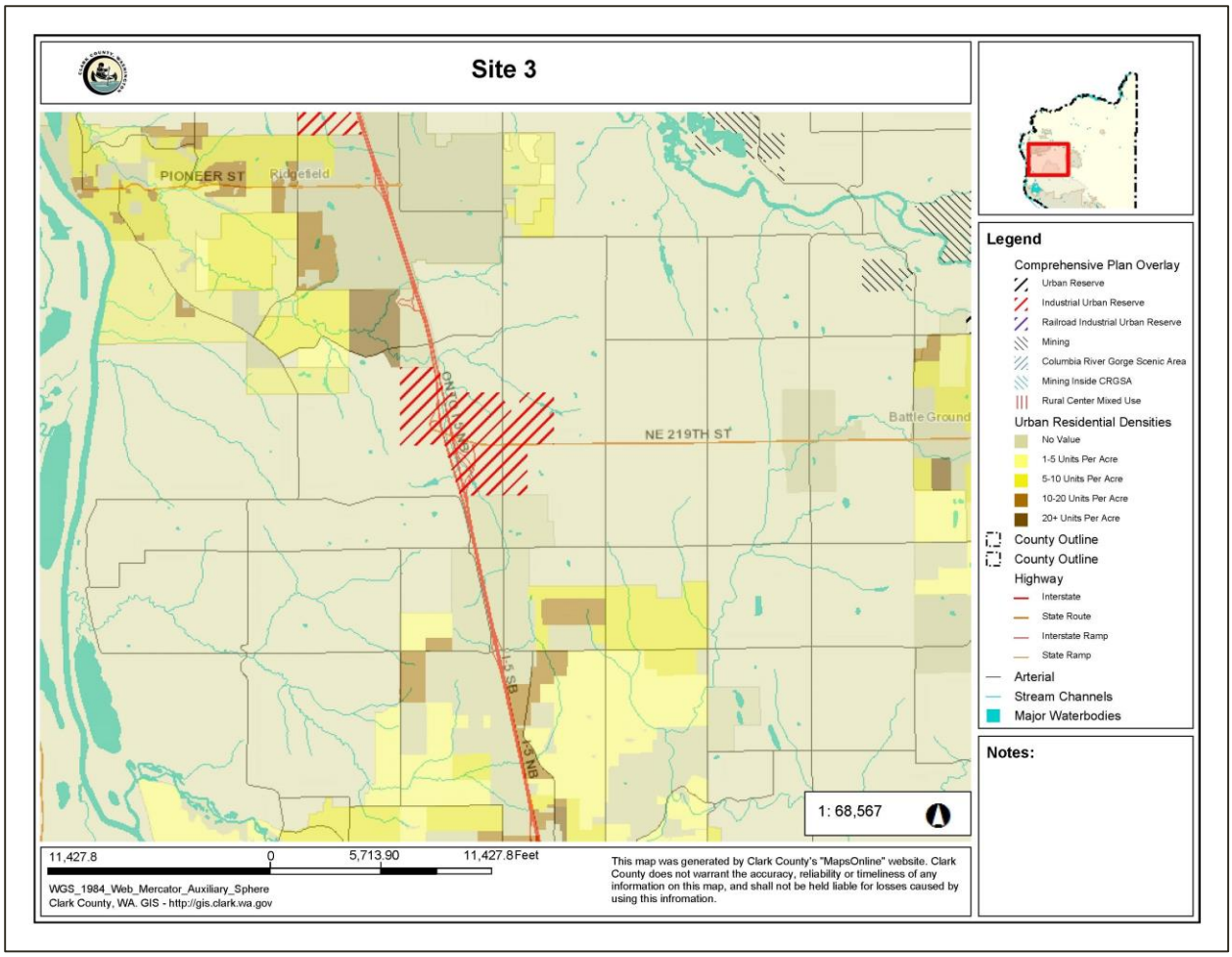


Source: Clark County GIS 2015

Exhibit 42. Site 3 and Areawide USDA CropScape Map

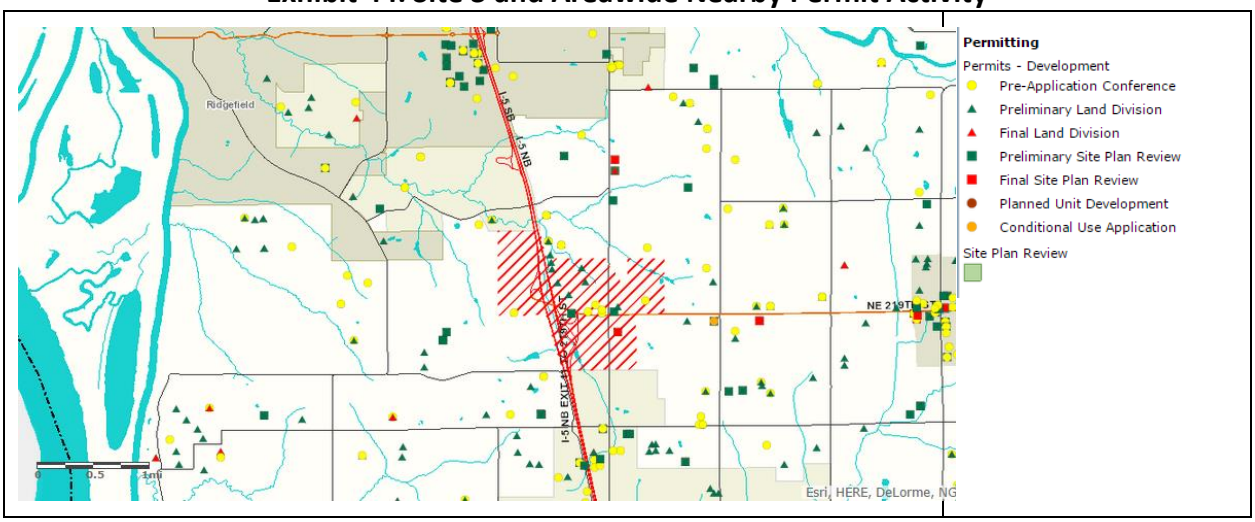
Source: USDA 2014

Exhibit 43. Site 3 and Areawide Nearby Urban Densities



Source: Clark County GIS 2015

Exhibit 44. Site 3 and Areawide Nearby Permit Activity



Source: Clark County GIS 2015

4.3 Agricultural Land Classification Criteria Analysis

GMA requires protection of agricultural, forest, and mineral lands of long-term commercial significance. This section presents a matrix analysis of how Site 3 and the Areawide Study Area compare to the minimum guidelines to classify agricultural lands in WAC 365-190-050 in Exhibit 45. This site was not evaluated in 2007. A summary of the analysis in the matrix is provided in Section 4.4.

Exhibit 45. Matrix: Site 3 and Areawide Study Area Agricultural Land Classification Criteria Analysis

	WAC 365-190-050 Criteria	2015 Analysis: Site 3	2015 Analysis: Site 3 Areawide
A.	(1) In classifying and designating agricultural resource lands, counties must approach the effort as a county-wide or area-wide process. Counties and cities should not review resource lands designations solely on a parcel-by-parcel process. Counties and cities must have a program for the transfer or purchase of development rights prior to designating agricultural resource lands in urban growth areas. Cities are encouraged to coordinate their agricultural resource lands designations with their county and any adjacent jurisdictions.	Areawide analysis is being prepared for four RILB inventory sites including Site 3. See right.	The study area includes Agriculture (Ag) designation between the UGAs of Ridgefield and Vancouver, including areas abutting Site 3 and generally continuing north, east, south and west until another non-Ag zone designation abuts, or until the contiguous Ag pattern changes (such as to the east where the Ag area is split by Rural designations or takes access from other roads). See Exhibit 34.
B.	2) Once lands are designated, counties and cities planning under the act must adopt development regulations that assure the conservation of agricultural resource lands. Recommendations for those regulations are found in WAC 365-196-815.	The County has adopted development regulations to conserve agricultural resource lands.	The County has adopted development regulations to conserve agricultural resource lands.
C.	(3) Lands should be considered for designation as agricultural resource lands based on three factors:		
D.	(a) The land is not already characterized by urban growth. To evaluate this factor, counties and cities should use the criteria contained in WAC 365-196-310.	Site 3 parcels range from less than 0.26 to 75 acres. The parcels are in agricultural or rural residential use.	The Site 3 areawide parcels range from 0.26 to 100 acres. The majority of the study area includes parcels that range from 20-75 acres in size.
E.	(b) The land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics. Some agricultural operations are	Much of the land is in current use taxation for agricultural purposes. About 55% is considered prime farmland and another 4% is prime farmland if drained. NRCS soil data show 60% of the land is Class 3 capability with small areas of	Much of the study area is in current use taxation for agriculture. The area contains 48% prime farmland, 3% prime farmland if drained, 20% farmland of statewide importance, and 28% not prime farmland. Farmland

	WAC 365-190-050 Criteria	2015 Analysis: Site 3	2015 Analysis: Site 3 Areawide
	less dependent on soil quality than others, including some livestock production operations.	Class 1 (1%) and Class 2 (6%); the balance includes Class 4 and 6 soils, which are considered to have limitations. See Appendix A. Stormwater features include drainage ditches and culverts.	classes are predominantly Classes 3, 4 and 6 and small amounts of Classes 1, 2, and 7. See Appendix A. Stormwater features include drainage ditches and culverts.
F.	(i) Lands that are currently used for agricultural production and lands that are capable of such use must be evaluated for designation. The intent of a landowner to use land for agriculture or to cease such use is not the controlling factor in determining if land is used or capable of being used for agricultural production. Land enrolled in federal conservation reserve programs is recommended for designation based on previous agricultural use, management requirements, and potential for reuse as agricultural land.	See Row E.	See Row E.
G.	(ii) In determining whether lands are used or capable of being used for agricultural production, counties and cities shall use the land-capability classification system of the United States Department of Agriculture Natural Resources Conservation Service as defined in relevant Field Office Technical Guides. These eight classes are incorporated by the United States Department of Agriculture into map units described in published soil surveys, and are based on the growing capacity, productivity and soil composition of the land	The study area contains non-irrigated Class 1, 2, 3, 4 with some Class 6 soils. Class 1 1% Class 2 6% Class 3 60% Class 4 12% Class 5 0% Class 6 21% Class 7 0% Water 0% Total 100.0% According to the NRCS, capability levels are high or moderate for Class 1 and 2 soils and limited for Class 3, and in particular for Classes 4- 7. Most soils area Class 3. Class 1 soils have few limitations that restrict their use.	The areawide information shows that the area contains Class 1, 2, 3, 4 with some Class 6 and 7 soils. Most soils area Class 3. Class 1 1% Class 2 2% Class 3 65% Class 4 10% Class 5 0% Class 6 19% Class 7 3% Water 0% Total 100.0% See Site 3 at left for descriptions, plus: Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

	WAC 365-190-050 Criteria	2015 Analysis: Site 3	2015 Analysis: Site 3 Areawide
		Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices. Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both. Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both. Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.	
H.	(c) The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should consider the following nonexclusive criteria, as applicable:		
I.	(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service;	About 55% of soils are considered prime farmland, and 4% are prime farmland if drained. See Appendix A.	About 48% of soils are considered prime farmland, and 3% are prime farmland if drained. See Appendix A.
J.	(ii) The availability of public facilities, including roads used in transporting agricultural products	I-5 runs north and south through the eastern section of the site. It is a designated freight route and a major interstate highway. I-5 carries urban traffic and is not a rural road used primarily for the transport of agricultural productions. SR 502 runs east and west and cuts through the middle of the site where it joins I-5. It carries urban volumes and is a state designated freight route. Traffic on SR 502 is expected to double in the next 20 years. WSDOT has a widening project to increase the width from 2 lanes to 4 lanes.[19]	Similar as for Site 3. See Exhibit 37.

[19] WSDOT. 2015. SR 502 - Widening From I-5 to Battle Ground. Available: http://www.wsdot.wa.gov/projects/SR502/Widening/.

	WAC 365-190-050 Criteria	2015 Analysis: Site 3	2015 Analysis: Site 3 Areawide
		Some water lines traverse the area. Sewer lines are further south in the Vancouver UGA or further northwest in the Ridgefield UGA. See Exhibit 37. The Clark Regional Wastewater District has planned capital project line extensions between 2014 and 2019, including the Discovery Corridor Wastewater Transmission System. Improvements will traverse the Site 3 area in order to connect the Ridgefield UGA to the Salmon Creek Wastewater Management System.[20]	
K.	(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights;	Parcels with AG-20 zoning are in the program as well as Rural zoned property in ag use. Many rural-zoned properties are not in the program.	A majority of the parcels in the study areas west and east of Site 3 are in current use taxation.
L.	(iv) The availability of public services;	The Ridgefield School District serves the site. The South Ridge Elementary School lies south of the site. The site is also served by the Clark County Fire & Rescue District. The site is patrolled by the Clark County Sheriff's West district.	Same as Site 3 alone.
M.	(v) Relationship or proximity to urban growth areas;	The site is adjacent to the south boundary of the Ridgefield UGA and adjacent to the north boundary of the Vancouver UGA.	The study area west of the site is adjacent to the south boundary of the Ridgefield. The study area east of the site is not adjacent to any UGAs.
N.	(vi) Predominant parcel size;	The site contains parcels of less than 0.26 to 75 acres. The majority of parcels range in size from 0.26 to 20 acres.	The study area west of the site contains parcels of 0.26 to 100 acres. There is one parcel that is between 75 to 100 acres in size. The study east of the site contains parcels of 0.26 to 75 acres.
O.	(vii) Land use settlement patterns and their compatibility with agricultural practices;	The property is generally open in character, but there is development in the central parts of the site, particularly along and near major roads and intersections.	The study area west of the site is generally open and has few agricultural and residential structures. Structures are concentrated in the western section of this study area. The study area east of the site is also

[20] See project description and maps: http://www.crwwd.com/projects/dcwts/index.php.

	WAC 365-190-050 Criteria	2015 Analysis: Site 3	2015 Analysis: Site 3 Areawide
		UGA territory is to the south and northwest.	generally open with some agricultural and residential structures scattered throughout the study area.
P.	(viii) Intensity of nearby land uses;	Densities in UGAs near the site are: 5-10 units per acre, 10-20 units per acre and some 1-5 units per acre. See Exhibit 43.	Same as Site 3. Further westward and eastward of the areawide boundary lands are more rural.
Q.	(ix) History of land development permits issued nearby;	There have been permits within and surrounding Site 3; there is a concentration of permits in the UGAs.	Same as for Site 3. There is a lesser concentration of permits outside of Site 3 but within the areawide boundary.
R.	(x) Land values under alternative uses; and	Properties under current use assessment in the study area are reduced compared to taxable value. An agricultural property abutting I-5 shows: Market Value $631,642.00 Taxable Value $106,571.00 A property with structures is also well discounted: Market Value $456,834.00 Taxable Value $300,940.0	Results are similar as for Site 3. More properties are in current use assessment and discounted.
S.	(xi) Proximity to markets.	Abuts Vancouver and Ridgefield UGAs. West of Battleground UGA.	Same as for Site 3.
T.	(4) When designating agricultural resource lands, counties and cities may consider food security issues, which may include providing local food supplies for food banks, schools and institutions, vocational training opportunities in agricultural operations, and preserving heritage or artisanal foods.	See Exhibit 17 and Exhibit 31. In Clark County the number of small farms has been increasing over time, and represents more intensive, value-added, urban-oriented farming.[21] The area is in hay/silage predominantly according to USDA and WSDA information. It is not known if this site provides products to the local market.	See Exhibit 17 and Exhibit 31. Most of the area is documented as having hay/silage. It is not known if this site provides products to the local market. Oltmann Farms Inc. is in the study area to the east and produces hay, oats and wheat sold out of their barn and have provided agri-tourism in the form of a pumpkin patch.[22]

[21] BERK. 2012. Clark County Rural Lands Study. Available: http://www.clark.wa.gov/planning/rurallands/index.html.

[22] The Reflector. October 8, 2014. "Oltmann Farms offers pumpkins, fall fun for families." Available: http://www.thereflector.com/home_scene/article_47303530-4e7b-11e4-9c50-bb59eef9e2cc.html

	WAC 365-190-050 Criteria	2015 Analysis: Site 3	2015 Analysis: Site 3 Areawide
U.	(5) When applying the criteria in subsection (3)(c) of this section, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities.	See Exhibit 17 Row U and Exhibit 31 Row U. The area supports hay/silage which represents the top crop in the county.	See Exhibit 17 Row U and Exhibit 31 Row U. The area supports hay/silage which represents the top crop in the county.
V.	(6) Counties and cities may further classify additional agricultural lands of local importance. Classifying additional agricultural lands of local importance should include, in addition to general public involvement, consultation with the board of the local conservation district and the local committee of the farm service agency. It may also be useful to consult with any existing local organizations marketing or using local produce, including the boards of local farmers markets, school districts, other large institutions, such as hospitals, correctional facilities, or existing food cooperatives. These additional lands may include designated critical areas, such as bogs used to grow cranberries or farmed wetlands. Where these lands are also designated critical areas, counties and cities planning under the act must weigh the compatibility of adjacent land uses and development with the continuing need to protect the functions and values of critical areas and ecosystems.	The County has not designated agricultural land of local importance. This is an optional policy choice.	Same as for Site 3.

4.4 Summary and Conclusions

Site 3

Site 3 is zoned for rural and agricultural uses and contains about 764 acres. Just over half of the site is considered prime farmland soils, and a portion of it is in current use taxation. The parcels are moderate and smaller sizes and have a greater concentration of homes than other sites under review.

The agricultural market is showing an increase in small value added production and direct sales, CSAs, and other newer local food trends. The properties appear to have hay/silage, and the relationship to the local food system is unknown.

The subject sites are in proximity of urban uses at urban densities, with water service; sewer service is located further away, but is planned to go through the area to serve the Ridgefield UGA. Schools are located in proximity to the sites. Fire protection is by special district. There has been recent permit activity regarding commercial and residential uses to the south and north of the sites in the UGA though some permitting has occurred in the rural portions of the site. SR 502 and I-5 facilitate urban traffic.

Some of the site is under current use taxation, and thus the effect of growth pressures is not felt fiscally; rural zoned areas have less land in current use taxation. The value of the land under urban uses would be greater.

The RILB Inventory (BERK Consulting et al. September 2015, under separate cover) shows the property meets screening criteria to be considered a RILB.

Areawide

The areawide study area consists of about 2,109 acres, and Site 3 is about 36% of the areawide study area.

If Site 3 were removed from the AG-20 designation, about 64% of the areawide study area would remain in AG-20 zoning; the reduction of the AG-20 zone would reduce land designated agriculture at the eastern and western extent of the AG-20 zoning along SR 502 and NW 219th Street. The area east of I-5 zoned AG-20 would be notably smaller whereas if the area were reduced on the west the reduction would be less marked. There is no known interdependence among the agricultural businesses.

Most of the land is documented to be in hay/silage but specific agricultural uses are unknown. One of the farms is documented to serve the local food market and sells directly to the public. This is similar to the countywide trend of small high value farms.

Within the study area, the uses are typically agriculture and rural residential lots.

There are schools abutting the study area. Emergency services are provided by a fire district and the Clark County Sheriff, and these would continue in any case. There has been recent permit activity regarding commercial and residential uses encircling and within the study area. The volume of traffic on SR 502 and I-5 is that of an urban arterial.

Most of the broader study area is in current use taxation especially to the eastern and western extents, and it is likely the value of the land for urban uses would be higher than for the use under agriculture.

5.0 SITE 4 AND AREAWIDE STUDY AREA

5.1 Study Area Description

This evaluation addresses Site 4 and an area similarly designated and zoned surrounding Site 4 east of Vancouver. See Exhibit 46.

Exhibit 46. Site 4 and Areawide Study Area Description

Description	Comments
Site 4: Vancouver East	The site is about 366 acres and lies east of the Vancouver UGA and NE 162nd Street.
Areawide Analysis:	The areawide study area includes Agricultural designation between the UGAs of Vancouver and Camas, including areas abutting Site 4 and generally encompassing the full contiguous Agricultural designation until it abuts a non-Agricultural designation.

5.2 Maps Reviewed

A series of maps were reviewed as described in Exhibit 47in order to conduct the Site 4 and Areawide analysis of agricultural land designation criteria in Section 5.3.

Exhibit 47. Maps Reviewed: Site 4 and Areawide Study Area

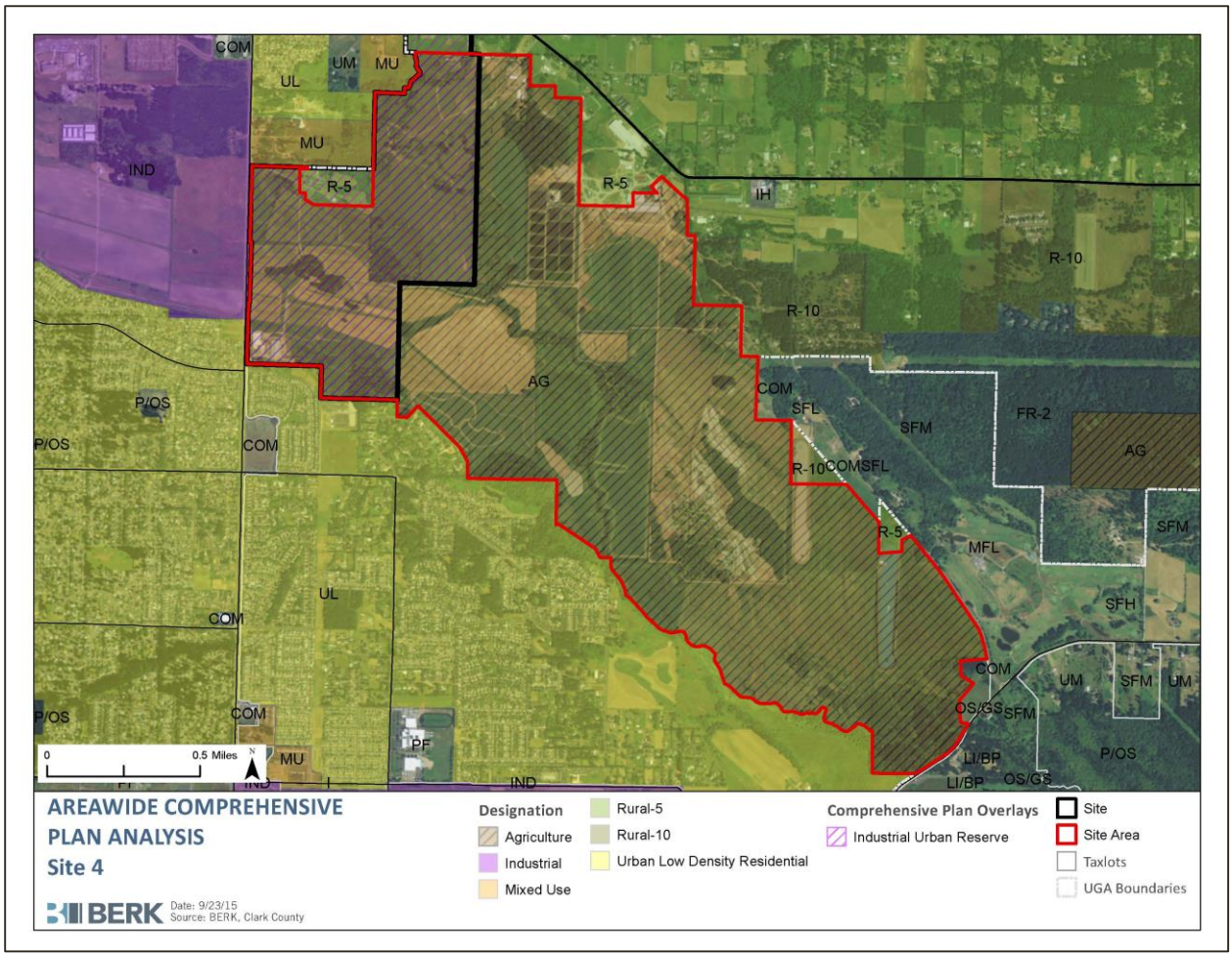
Maps	Comments
Comprehensive Plan	Site 4: Site is 366 acres, and is designated an Industrial Urban Reserve Overlay with Agriculture designation and small areas of Rural designation. See Exhibit 48. Areawide: Area east and southeast of Site 4 has an Agriculture designation and equals about 1,533 acres. See Exhibit 48.
Zoning	Site 4: Agriculture-20 (AG-20) and Rural-5 (R-5). See Exhibit 50. Areawide: AG-20 east of Site 4 (which has AG-20 and R-5 designations). See Exhibit 50.
Soils	Site 4: Cove silty clay loam, Semiahmoo muck and Gee silt loam make most of the study area soils. About 30% of the study area soil is considered prime farmland and 29% is prime farmland if drained. Approximately 41% is not prime farmland. See Appendix A. Areawide: Most of the land (67%) is Cove silty clay loam, 0-3%. Semiahmoo muck is the second most prevalent (15%). See Appendix A.
Topography	Site 4: Generally flat most of the land with 0-8% slope. See soil report, Appendix A. Areawide: The area is generally flat at 0-8% with very little land at 8-20%.
Aerial photography	Site 4: Along perimeter roads are there are dairy buildings and a few residences. Most of the land is open. Areawide: Similar to Site 4 but with greater extents of open agricultural and environmentally constrained land.
Current Use	Site 4: Mainly agriculture with few parcels in residential use. Most of the land is in current use taxation. See Exhibit 50. Areawide: Agriculture with majority of parcels in current use taxation. See Exhibit 50.
Parcel size	Site 4: Variable, with parcels ranging from 1 to 100 acres and greater. See Exhibit 49. Areawide: Variable, with parcels from 0.26 to 100 acres and greater. Majority of study area is within parcels ranging in size from 20-100 acres. See Exhibit 49.

Maps	Comments
Infrastructure: Roads, Sewer, Water	Site 4: SR 500 is on the northern border of the site, and NE 162nd on the western border is a state designated freight route. Sewer and water lines are available on NE 162nd Street. See Exhibit 51. Areawide: Aside from sewer and water available along Site 4 there is no major water or sewer system infrastructure within the study area. See Exhibit 51.
Floodplains	Site 4: The northeast section of the site contains floodway and floodway fringe areas. Areawide: The majority of the study area contains a floodway, floodway fringe and 500 year flood area.
Wetlands	Site 4: Wetlands are mapped, see Exhibit 52. There are wetland areas on the western side of the Site near NE 162nd Street. Areawide: Wetlands and riparian areas are mapped. See Exhibit 52.
Streams	Site 4: Lacamas Creek flows through the northeast section of the site. See Exhibit 52. Areawide: Lacamas Creek and Spring Branch continues through much of the length of the study area, flowing southeast. See Exhibit 52.
Aquifer Recharge	Site 4: The area is entirely in Category 2 Recharge Areas. See Exhibit 55. Areawide: The area is entirely in Category 2 Recharge Areas. See Exhibit 55.
Geologic Hazards	Site 4: Minimal slopes. Peat soils are present, as are other defined low to moderate liquefaction hazards. Areawide: Same as Site 4.

Site 4 and Areawide Maps

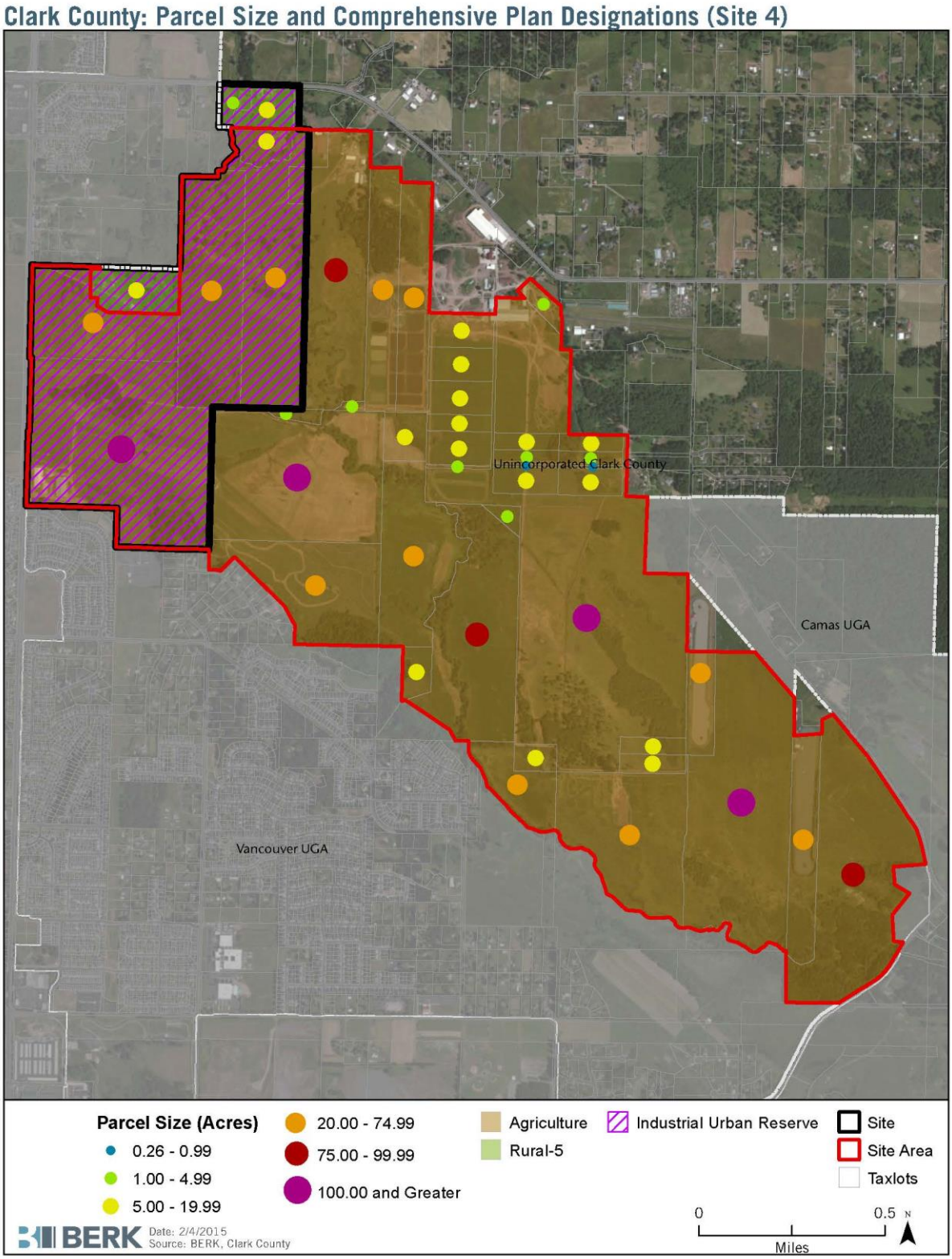
This Section presents maps specific to Site 4 as well as the Areawide Study Area regarding Comprehensive Plan designations, Zoning designations, parcel size, infrastructure, critical areas, soils and capability class, and other relevant topics. These maps are cross-referenced throughout the analysis.

Exhibit 48. Site 4 and Areawide Study Area



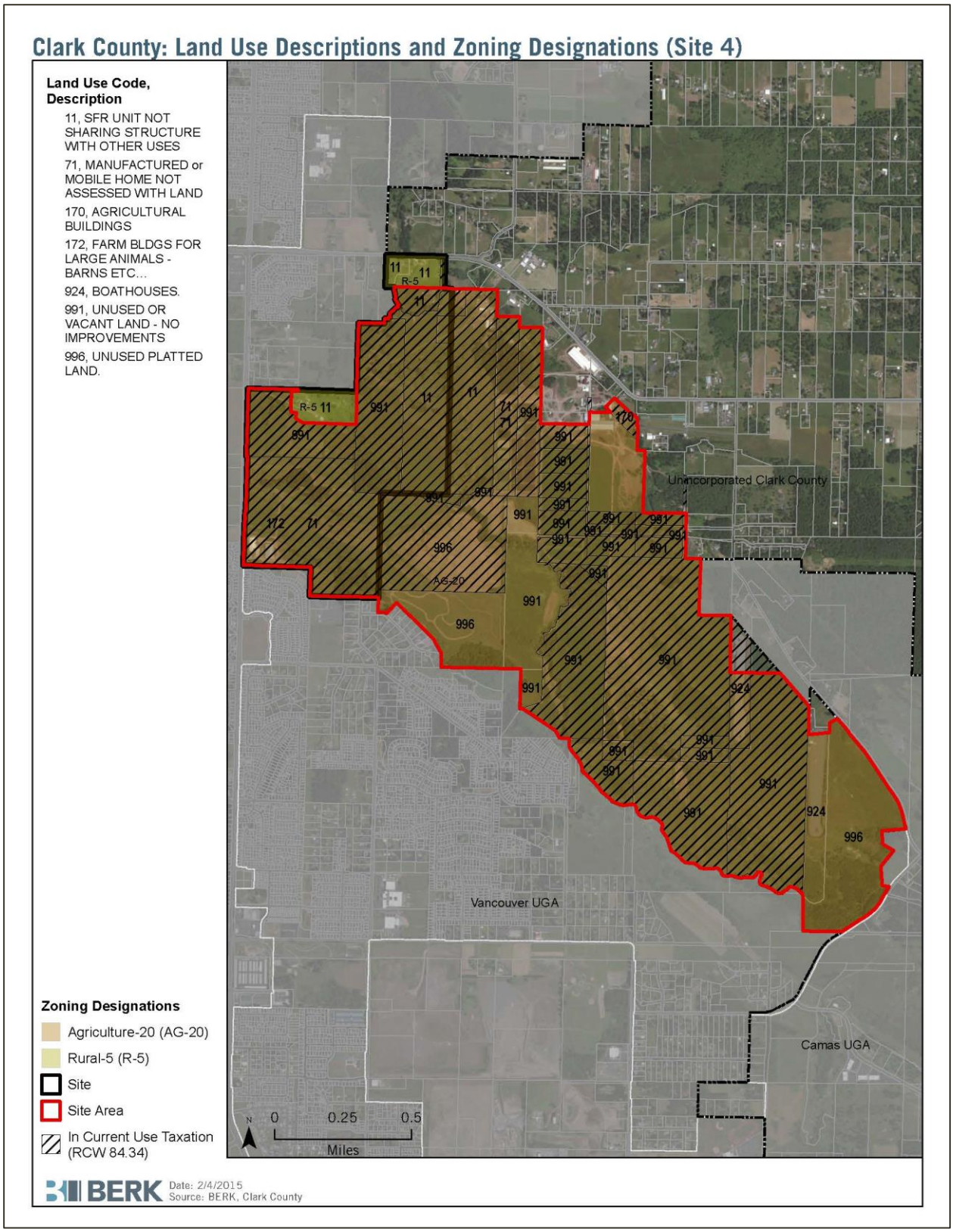
Source: Clark County GIS, BERK Consulting 2015

Exhibit 49. Site 4 and Areawide Comprehensive Plan Designation and Parcel Sizes



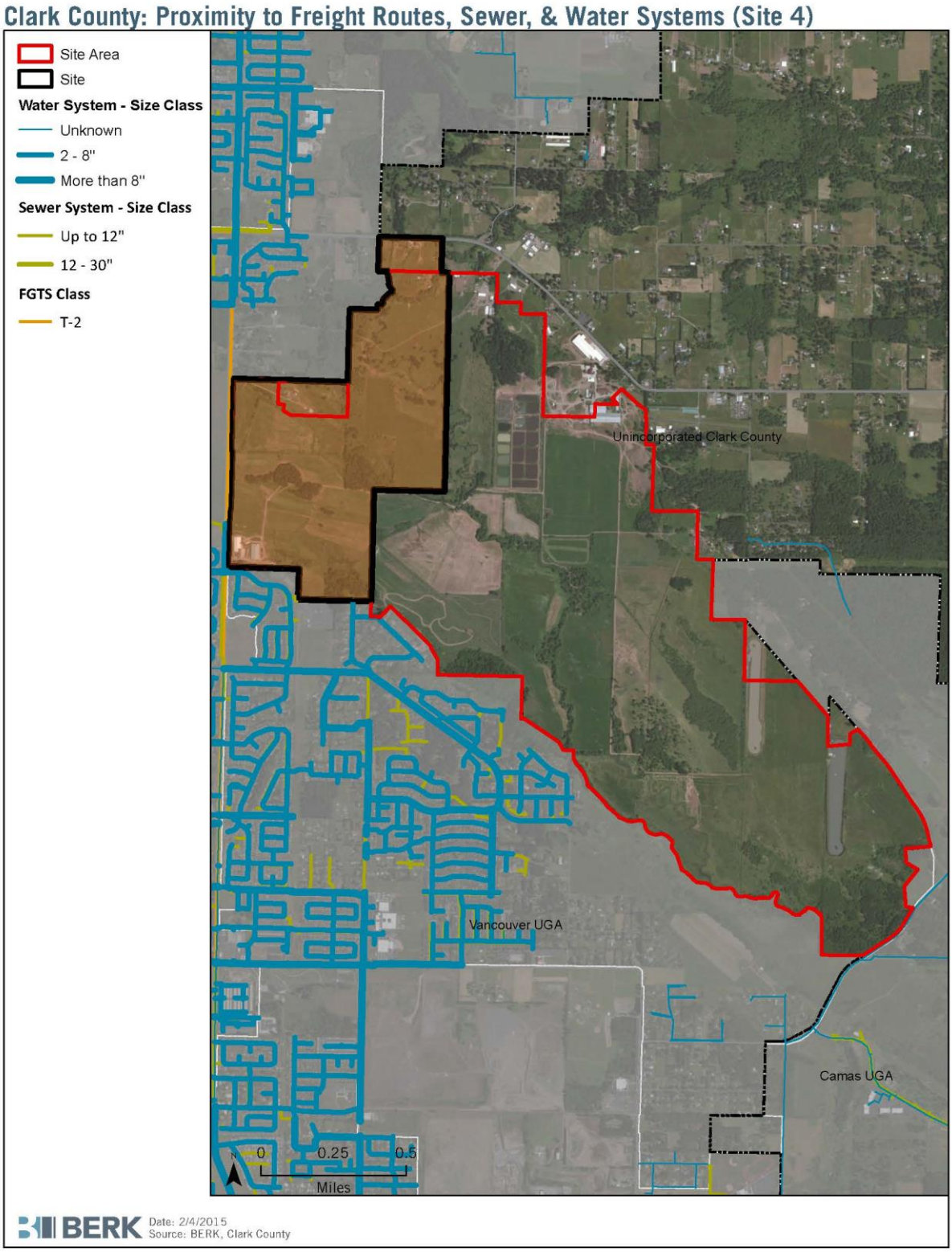
Source: Clark County GIS, BERK Consulting 2015

Exhibit 50. Site 4 and Areawide Current Land Uses and Zoning



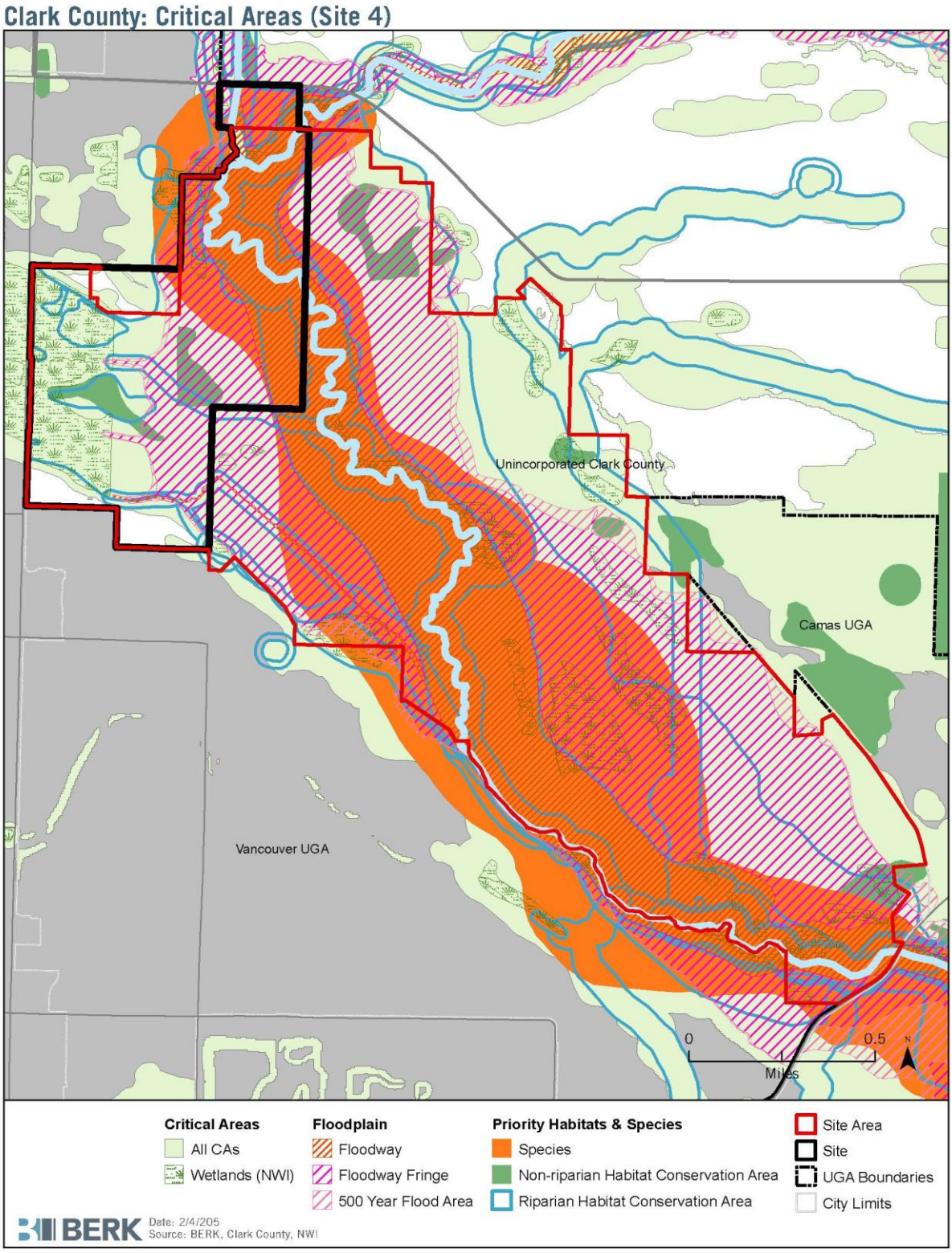
Source: Clark County GIS, BERK Consulting 2015

Exhibit 51. Site 4 and Areawide Proximity of Freight Routes, Water, and Sewer Facilities



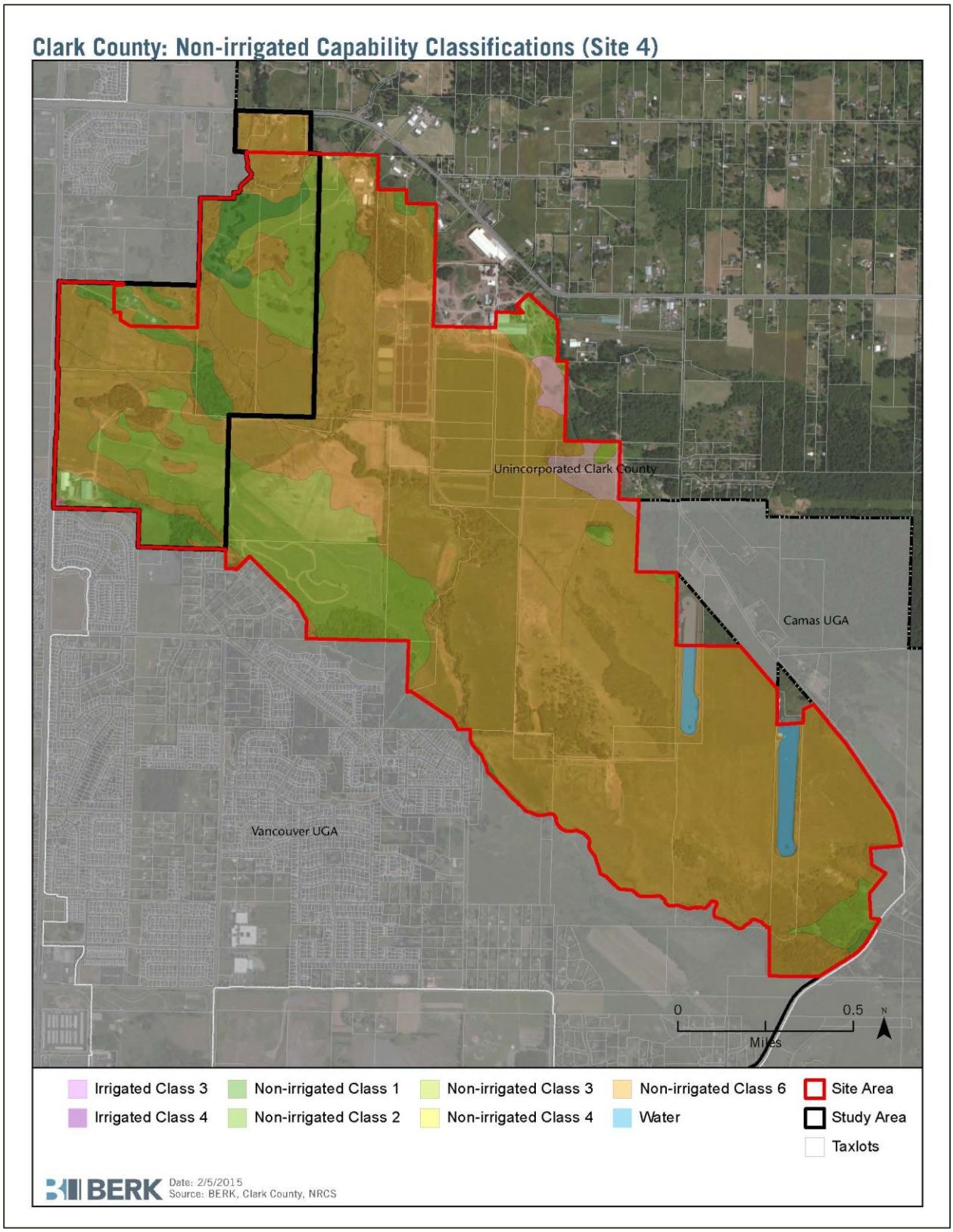
Source: Clark County GIS, BERK Consulting 2015

Exhibit 52. Site 4 and Areawide Mapped Presence of Critical Areas



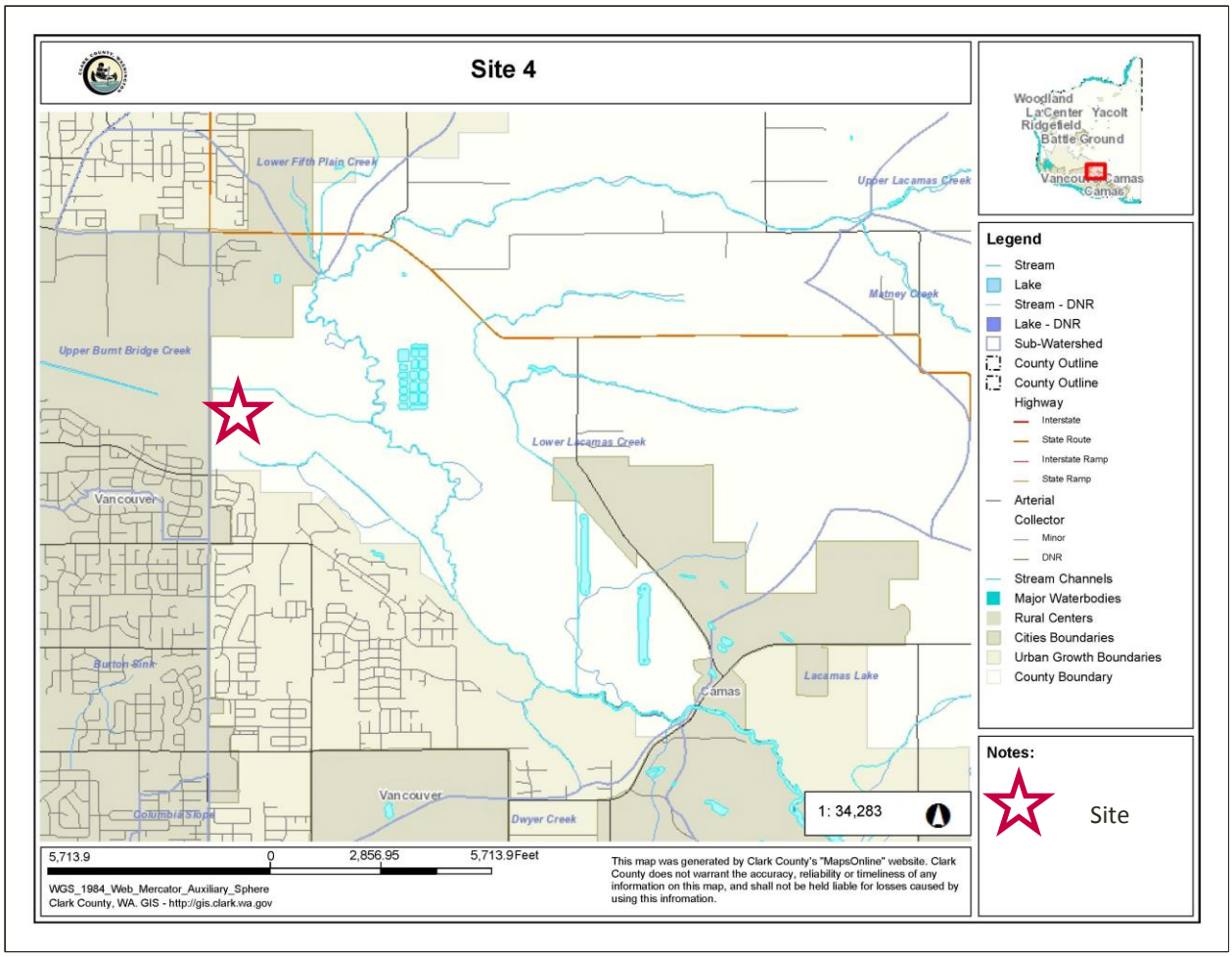
Source: Clark County GIS, BERK Consulting 2015

Exhibit 53. Site 4 and Areawide Docket Soil Capability Classes



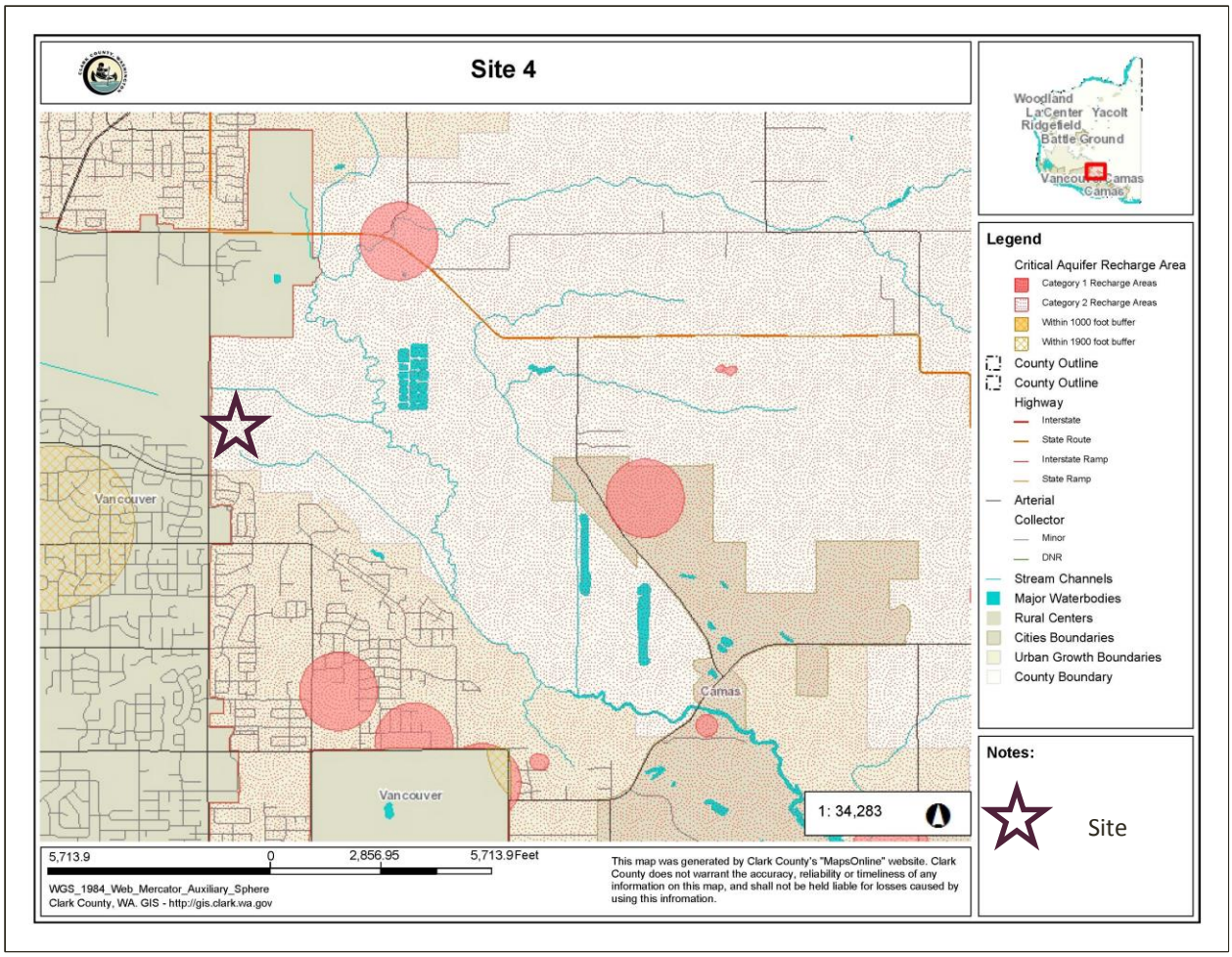
Source: Clark County GIS, BERK Consulting 2015

Exhibit 54. Site 4 and Areawide Vicinity Drainage Basins



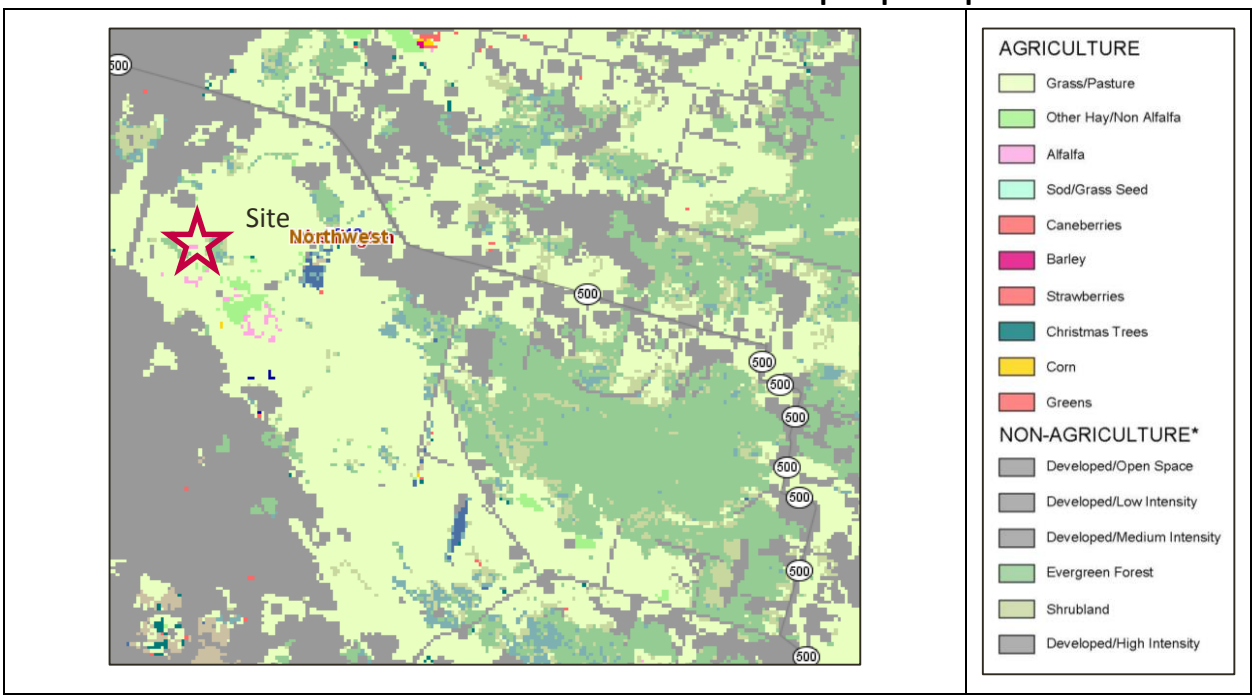
Source: Clark County GIS 2015

Exhibit 55. Site 4 and Areawide Aquifer Classifications in Vicinity



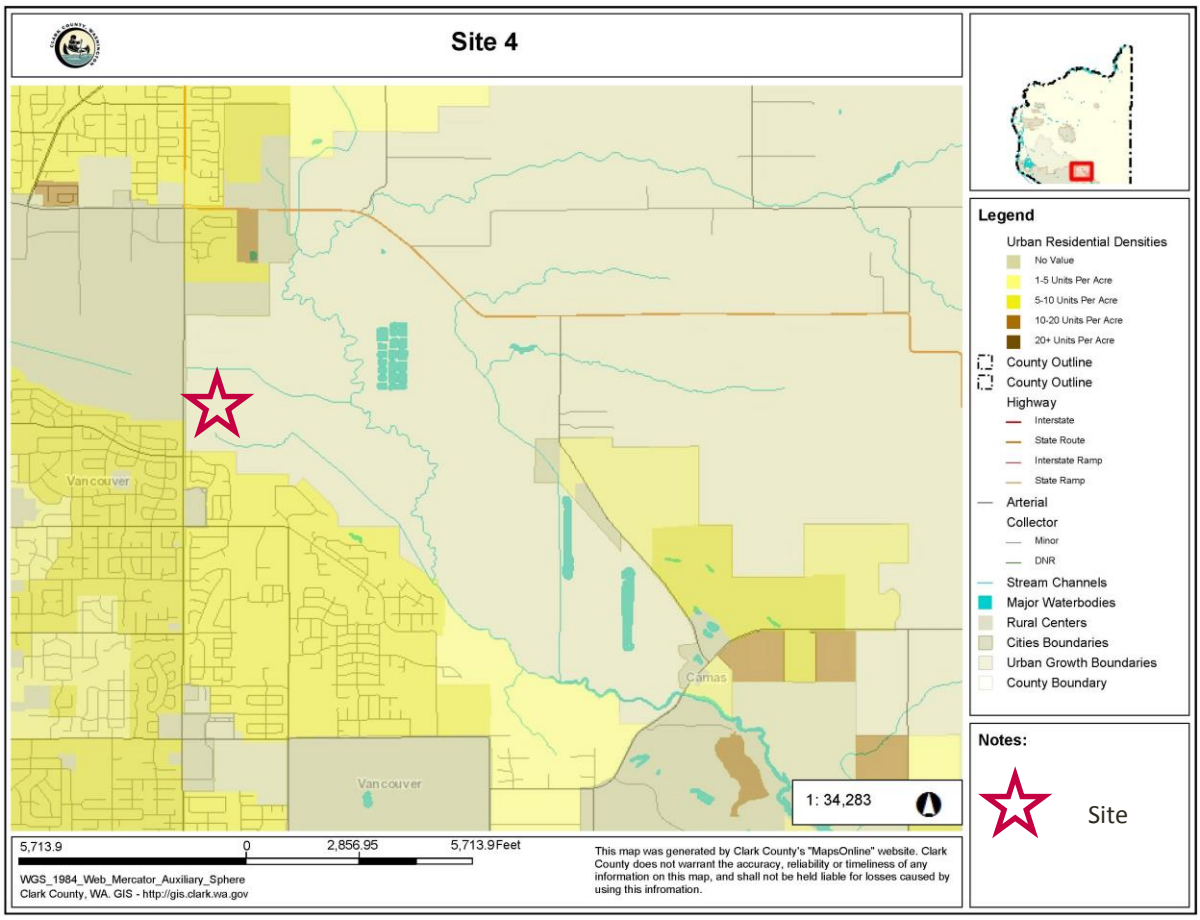
Source: Clark County GIS 2015

Exhibit 56. Site 4 and Areawide USDA CropScape Map



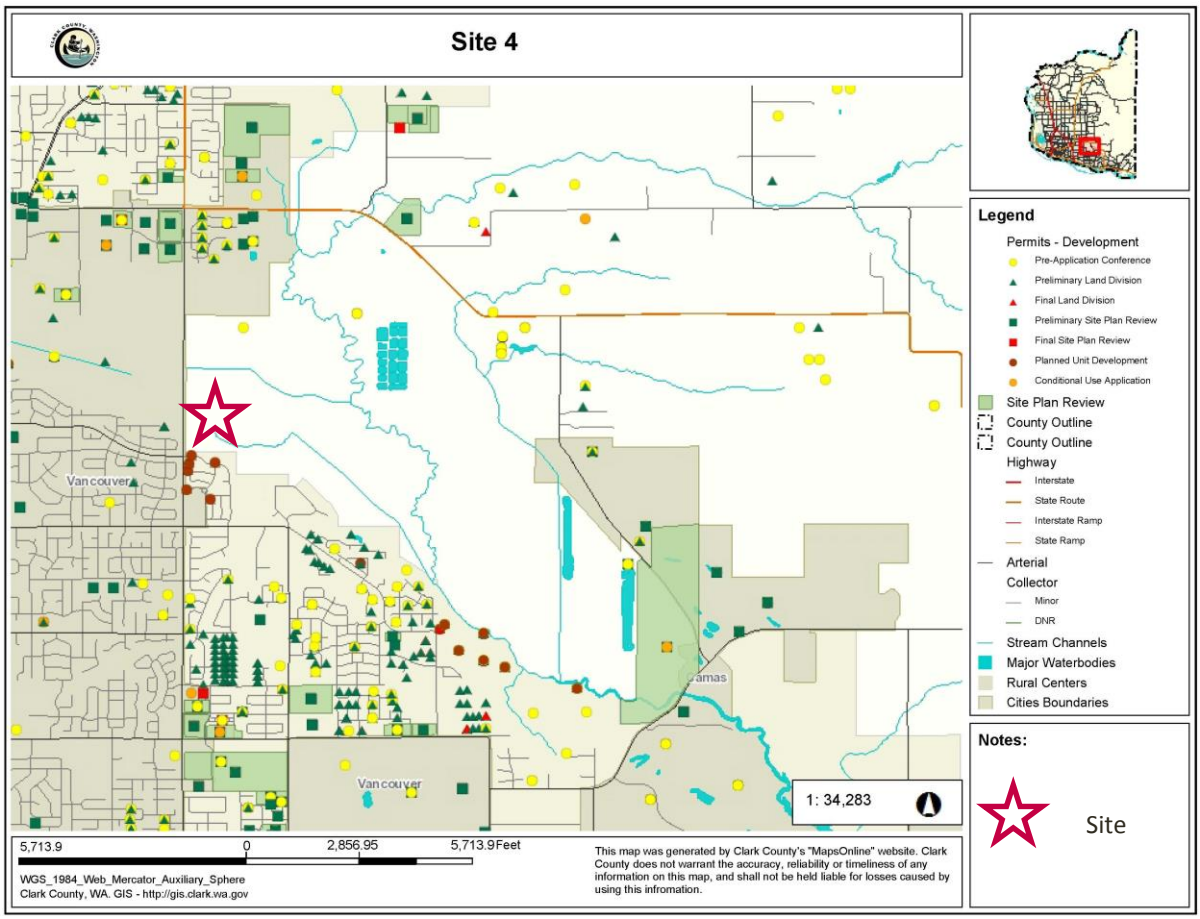
Source: USDA 2014

Exhibit 57. Site 4 and Areawide Nearby Urban Densities



Source: Clark County GIS 2015

Exhibit 58. Site 4 and Areawide Nearby Permit Activity



Source: Clark County GIS 2015

5.3 Agricultural Land Classification Criteria Analysis

GMA requires protection of agricultural, forest, and mineral lands of long-term commercial significance. This section presents a matrix analysis of how Site 4 and the Areawide Study Area compare to the minimum guidelines to classify agricultural lands in WAC 365-190-050; see Exhibit 59. This site was not evaluated in 2007. A summary of the analysis in the matrix is provided in Section 5.4.

Exhibit 59. Matrix: Site 4 and Areawide Study Area Agricultural Land Classification Criteria Analysis

	WAC 365-190-050 Criteria	2015 Analysis: Site 4	2015 Analysis: Site 4 Areawide
A.	(1) In classifying and designating agricultural resource lands, counties must approach the effort as a county-wide or area-wide process. Counties and cities should not review resource lands designations solely on a parcel-by-parcel process. Counties and cities must have a program for the transfer or purchase of development rights prior to designating agricultural resource lands in urban growth areas. Cities are encouraged to coordinate their agricultural resource lands designations with their county and any adjacent jurisdictions.	Areawide analysis is being prepared for four RILB inventory sites including Site 4. See right.	The areawide study area includes Agricultural designations between the UGAs of Camas and Vancouver, including areas abutting Site 4 and generally continuing south and southwest until another non-Agricultural designation abuts. See Exhibit 48.
B.	2) Once lands are designated, counties and cities planning under the act must adopt development regulations that assure the conservation of agricultural resource lands. Recommendations for those regulations are found in WAC 365-196-815.	The County has adopted development regulations to conserve agricultural resource lands.	The County has adopted development regulations to conserve agricultural resource lands.
C.	(3) Lands should be considered for designation as agricultural resource lands based on three factors:		
D.	(a) The land is not already characterized by urban growth. To evaluate this factor, counties and cities should use the criteria contained in WAC 365-196-310.	The Site 4 study area parcels range from 1 to 100 acres or greater. The parcels are in dairy and other agricultural or rural residential use.	The Site 4 areawide parcels range from 0.26 to 100 acres or greater. Majority of study area is within parcels ranging in size from 20-100 acres or greater.
E.	(b) The land is used or capable of being used for agricultural production. This factor evaluates whether lands are well suited to agricultural use based primarily on their physical and geographic characteristics. Some agricultural operations are less	The site is in use as a dairy operation and all AG-20 zoned parcels are in current use taxation. NRCS soil data shows 30% of the site is prime farmland and 29% is prime farmland if drained. The soil capability classes include Classes 1-3 (about 42% cumulatively) and Class 6 (the	Much of the study area is in current use taxation for agriculture. NRCS soil information shows 10% is prime farmland soil and 20% is prime farmland if drained; the majority is not prime farmland. Most of the soils are considered Class 6 (76%).

	WAC 365-190-050 Criteria	2015 Analysis: Site 4	2015 Analysis: Site 4 Areawide
	dependent on soil quality than others, including some livestock production operations.	majority at 58%). Some is considered to have limitations depending on whether the land is drained or due to other limiting factors. See soil information in Appendix A. The site is in Lower Lacamas Creek basin. There are stormwater management facilities in roads abutting the site.	Stormwater characteristics are similar as for Site 4, with more rural stormwater management to the east.
F.	(i) Lands that are currently used for agricultural production and lands that are capable of such use must be evaluated for designation. The intent of a landowner to use land for agriculture or to cease such use is not the controlling factor in determining if land is used or capable of being used for agricultural production. Land enrolled in federal conservation reserve programs is recommended for designation based on previous agricultural use, management requirements, and potential for reuse as agricultural land.	The site is used for agriculture purposes as a dairy; some property is used for residential purposes.	Based on current use taxation records much of the land is used for agriculture. USDA Crop Scape data shows pasture/silage as the primary agricultural activity.
G.	(ii) In determining whether lands are used or capable of being used for agricultural production, counties and cities shall use the land-capability classification system of the United States Department of Agriculture Natural Resources Conservation Service as defined in relevant Field Office Technical Guides. These eight classes are incorporated by the United States Department of Agriculture into map units described in published soil surveys, and are based on the growing capacity, productivity and soil composition of the land	The study area contains non-irrigated Class 1, 2, 3 and 6 soils. Most soils are Class 6. Class 1 5% Class 2 13% Class 3 24% Class 4 0% Class 5 0% Class 6 58% Class 7 0% Water 0% Total 100.0% According to the NRCS, capability levels are high or moderate for Class 1 and 2 soils and limited for Class 3, and in particular for Classes 4- 6. Class 1 soils have few limitations that restrict their use.	The areawide information shows that the area contains non-irrigated Class 1, 2, 3 and 6 soils; mostly Class 6. See Site 4 and Appendix A for description. Class 1 1% Class 2 4% Class 3 17% Class 4 0% Class 5 0% Class 6 76% Class 7 0% Water 1% Total 100.0%

	WAC 365-190-050 Criteria	2015 Analysis: Site 4	2015 Analysis: Site 4 Areawide
		Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices. Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both. Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.	
H.	(c) The land has long-term commercial significance for agriculture. In determining this factor, counties and cities should consider the following nonexclusive criteria, as applicable:		
I.	(i) The classification of prime and unique farmland soils as mapped by the Natural Resources Conservation Service;	About 30% of soils are considered prime farmland and 29% is considered prime farmland if drained.	About 10% of soils are considered prime farmland and 20% are prime farmland if drained. Most soils are not prime farmland (69%).
J.	(ii) The availability of public facilities, including roads used in transporting agricultural products	SR 500 is on the northern border of the site, and NE 162nd is a state designated freight route along the western border. Sewer and water lines are available on NE 162nd Street. See Exhibit 51	Aside from sewer and water available along Site 4 there is no major water or sewer system infrastructure within the study area. See Exhibit 51.
K.	(iii) Tax status, including whether lands are enrolled under the current use tax assessment under chapter 84.34 RCW and whether the optional public benefit rating system is used locally, and whether there is the ability to purchase or transfer land development rights;	A majority of the subject property is in the agricultural current use taxation program. Some rural zoned lands with homes are not in the program.	A majority of the parcels in the study area are in current use taxation.
L.	(iv) The availability of public services;	The site is served by Fire District 5. It lies in Drainage District 7. The Evergreen School District serves the site. The site is patrolled by the Clark County Sheriff's Office central district.	Same as for Site 4.
M.	(v) Relationship or proximity to urban growth areas;	The site is adjacent to the Vancouver UGA on its western and southern borders.	The study area is adjacent to the Vancouver UGA on its southwestern border and is also adjacent to the Camas UGA on its southeastern border.

	WAC 365-190-050 Criteria	2015 Analysis: Site 4	2015 Analysis: Site 4 Areawide
N.	(vi) Predominant parcel size;	The property contains parcels of 1 to 100 acres or greater.	The property contains parcels of 0.26 to 100 acres or greater. Only 2 parcels range in size from 0.26 to 1 acre.
O.	(vii) Land use settlement patterns and their compatibility with agricultural practices;	The property is generally open in character, except for the agricultural related buildings and homes. UGA territory is to the south, west and northwest.	The study area is generally open and has few agricultural and residential structures. Structures are concentrated in the southeast section of the study area. UGA territory is to the southwest, south and southeast.
P.	(viii) Intensity of nearby land uses;	Urban densities vary but are typically 5-10 units per acre. Some mixed use zoning abuts to the north. See Exhibit 48 and Exhibit 57.	Land uses to the west are the same as for the Site 4. Densities to the east range from 1-20 units per acre.
Q.	(ix) History of land development permits issued nearby;	Most permit activity has occurred in areas abutting and near to the site in the Vancouver UGA. Within the study area a portion was studied for inclusion in the UGA in the past.	Same as for Site 4.
R.	(x) Land values under alternative uses; and	The dairy is in current use taxation. Property with the dairy has $0 taxable land value and is taxed on the building value. Other land is discounted at just over 10% of value, such as: Market Value $238,788.00 Taxable Value $28,966.00	Similar discounted values are found in the rest of the study area. An example includes: Market Value $526,083.00 Taxable Value $55,255.00
S.	(xi) Proximity to markets.	Adjacent to the Vancouver UGA.	Adjacent to the Vancouver and Camas UGAs.
T.	(4) When designating agricultural resource lands, counties and cities may consider food security issues, which may include providing local food supplies for food banks, schools and institutions, vocational training opportunities in agricultural operations, and preserving heritage or artisanal foods.	See Exhibit 17 Row T for analysis relevant to the dairy operation. The property is owned by Andersen Dairy, based in Battle Ground. Their milk and other dairy products are sold throughout the Pacific Northwest as described by the company's website: https://andersendairy.com/ANDERSEN_DAIRY.php	See Exhibit 17 Row T for analysis relevant to the area.
U.	(5) When applying the criteria in subsection (3)(c) of this section, the process should result in designating an amount of agricultural resource lands sufficient to maintain and enhance the economic viability of the agricultural industry in the county over the long term; and to retain supporting agricultural	See Exhibit 17 Row U for analysis relevant to the dairy operation.	See Exhibit 17 Row U for analysis relevant to the area.

	WAC 365-190-050 Criteria	2015 Analysis: Site 4	2015 Analysis: Site 4 Areawide
	businesses, such as processors, farm suppliers, and equipment maintenance and repair facilities.		
V.	(6) Counties and cities may further classify additional agricultural lands of local importance. Classifying additional agricultural lands of local importance should include, in addition to general public involvement, consultation with the board of the local conservation district and the local committee of the farm service agency. It may also be useful to consult with any existing local organizations marketing or using local produce, including the boards of local farmers markets, school districts, other large institutions, such as hospitals, correctional facilities, or existing food cooperatives. These additional lands may include designated critical areas, such as bogs used to grow cranberries or farmed wetlands. Where these lands are also designated critical areas, counties and cities planning under the act must weigh the compatibility of adjacent land uses and development with the continuing need to protect the functions and values of critical areas and ecosystems.	The County has not designated agricultural land of local importance. This is an optional policy choice.	Same as for Site 4.

5.4 Summary and Conclusion

Site 4

Site 4 is zoned and used for agriculture and is in current use taxation. The dairy is part of a long-standing commercial operation based in Battle Ground WA. The property is large in the County's range of agricultural properties but is extensively constrained by critical areas. The long-term trend is of decline in large and mid-size operations, and rather an increase in small farms oriented to the urban, local food movement.

The agricultural market is showing an increase in small value added production and direct sales, CSAs, and other newer local food trends. The dairy sells products all over the Pacific Northwest based on their website.

The subject sites are in proximity of urban uses at urban densities, with urban services including water and sewer. A school district serves the site but do not abut the site. Fire protection is by special district and police protection would remain with the Clark County Sheriff. There has been recent permit activity in the Vancouver UGA. Major roads serve the site and primarily serve urban traffic.

Subject sites are under current use taxation, and thus the effect of growth pressures is not felt fiscally. The value of the land under urban uses would be greater.

The RILB Inventory (BERK Consulting et al. September 2015, under separate cover) shows the property meets screening criteria to be considered a RILB.

Areawide

Site 4 is 366 acres or about 24% of the areawide acreage of 1,532 acres. If Site 4 were removed from the AG-20 designation, about 75% of the areawide study area would remain in AG-20 zoning. The area is already bounded by urban land in Vancouver and Camas UGAs, and the AG designation is already isolated from other locations. However, given the extensive critical areas and the lack of likelihood that the area could be urbanized, low intensity agricultural use is appropriate.

Within the study area, the uses are typically agriculture with few residential lots.

The removal of the Site 4 properties from the areawide acreage would continue the decline in large and mid-size operations, and would remove some of the larger parcels in the County's AG-20 inventory, and would reduce areawide acres but likely would not change the use pattern of the rest of the highly constrained floodplain. This trend would likely continue with or without the Site 4 properties, and the trend towards small farms would likely continue.

As with Site 4, the areawide study area lies in proximity of urban uses at urban densities, with urban services including water and sewer, particularly from the Vancouver UGA. Emergency services are provided by two fire districts and the Clark County Sheriff and these would continue in any case. There has been recent permit activity regarding commercial and residential uses encircling the study area. The volume of traffic is based on urban use abutting the site.

Most of the area is in current use taxation, and it is likely the value of the land for urban uses would be higher than for the use under agriculture but would continue to reflect constraints.

APPENDIX A. NRCS SOIL INFORMATION

Land capability classification shows, in a general way, the suitability of soils for most kinds of field crops. Crops that require special management are excluded. The soils are grouped according to their limitations for field crops, the risk of damage if they are used for crops, and the way they respond to management. The criteria used in grouping the soils do not include major and generally expensive landforming that would change slope, depth, or other characteristics of the soils, nor do they include possible but unlikely major reclamation projects. Capability classification is not a substitute for interpretations that show suitability and limitations of groups of soils for rangeland, for woodland, or for engineering purposes.

In the capability system, soils are generally grouped at three levels-capability class, subclass, and unit. Only class and subclass are included in this data set.

Capability classes, the broadest groups, are designated by the numbers 1 through 8. The numbers indicate progressively greater limitations and narrower choices for practical use. The classes are defined as follows:

Class 1 soils have few limitations that restrict their use.

Class 2 soils have moderate limitations that reduce the choice of plants or that require moderate conservation practices.

Class 3 soils have severe limitations that reduce the choice of plants or that require special conservation practices, or both.

Class 4 soils have very severe limitations that reduce the choice of plants or that require very careful management, or both.

Class 5 soils are subject to little or no erosion but have other limitations, impractical to remove, that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 6 soils have severe limitations that make them generally unsuitable for cultivation and that restrict their use mainly to pasture, rangeland, forestland, or wildlife habitat.

Class 7 soils have very severe limitations that make them unsuitable for cultivation and that restrict their use mainly to grazing, forestland, or wildlife habitat.

Class 8 soils and miscellaneous areas have limitations that preclude commercial plant production and that restrict their use to recreational purposes, wildlife habitat, watershed, or esthetic purposes.

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Soil Names, Classifications, Rural Industrial Land Bank Inventory Sites: Areas 1 through 4

Soil Name	Farmland Classification	Non-irrigated Classification	Irrigated Classification	Area 1		Area 2		Areas 3		Area 4		Total
				Site Specific	Total Area	Site Specific	Total Area	Site Specific	Total Area	Site Specific	Total Area	
Cove silty clay loam, 0 to 3 percent slopes	Not prime farmland	Non-irrigated Class 6	-	2.37	146.83	11.34	94.71	3.47	28.24	133.04	1,023.74	1,293.52
Cove silty clay loam, thin solum, 0 to 3 percent slopes	Not prime farmland	Non-irrigated Class 6	-	0.19	67.75					16.88	16.88	84.63
Dollar loam, 0 to 5 percent slopes	All areas are prime farmland	Non-irrigated Class 3	-	162.79	1,084.17					44.90	68.61	1,152.78
Gee silt loam, 0 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 3	-			132.79	435.71	363.93	950.91			1,386.62
Gee silt loam, 20 to 30 percent slopes	Not prime farmland	Non-irrigated Class 4	-			4.60	29.42	60.49	109.10			138.53
Gee silt loam, 30 to 60 percent slopes	Not prime farmland	Non-irrigated Class 7	-			22.76	48.47		52.98			101.45
Gee silt loam, 8 to 20 percent slopes	Farmland of statewide importance	Non-irrigated Class 3	-			76.40	117.91	31.26	309.27			427.18
Hesson clay loam, 0 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-								17.52	17.52
Hesson clay loam, 8 to 20 percent slopes	Farmland of statewide importance	Non-irrigated Class 3	-								2.83	2.83
Hesson gravelly clay loam, 0 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-							23.11	24.09	24.09
Hillsboro loam, 15 to 20 percent slopes	Not prime farmland	Non-irrigated Class 4	-		2.04							2.04
Hillsboro loam, 20 to 30 percent slopes	Not prime farmland	Non-irrigated Class 4	-		1.18							1.18
Hillsboro loam, 3 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-	56.78	483.02							483.02
Hillsboro loam, 30 to 50 percent slopes	Not prime farmland	Non-irrigated Class 7	-		1.73							1.73
Hillsboro loam, 8 to 15 percent slopes	Farmland of statewide importance	Non-irrigated Class 3	-		117.62							117.62
Hillsboro silt loam, 0 to 3 percent slopes	All areas are prime farmland	Non-irrigated Class 1	-	236.37	582.21		15.96	10.41	20.48	19.19	19.54	638.20
Hillsboro silt loam, 3 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-			1.16	24.40	42.62	42.65			67.05
Hillsboro silt loam, 8 to 15 percent slopes	Farmland of statewide importance	Non-irrigated Class 3	-			10.43	56.92	61.40	115.30			172.22
Hockinson loam, 0 to 3 percent slopes	Prime farmland if drained	Non-irrigated Class 6	-		2.17						24.31	26.48
Lauren gravelly loam, 0 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-	0.28	0.99					13.94	15.30	16.29
Lauren gravelly loam, cemented substratum, 3 to 15 percent slopes	Farmland of statewide importance	Non-irrigated Class 3	-								13.45	13.45
Lauren very gravelly loam, 0 to 8 percent slopes	Farmland of statewide importance	Non-irrigated Class 4	Irrigated Class 4							0.72	0.73	0.73
McBee silt loam, coarse variant, 0 to 3 percent slopes	Prime farmland if drained	Non-irrigated Class 6	-	106.59	506.35					7.22	7.22	513.57
Miscellaneous Water	Not prime farmland	Water	-								18.72	18.72
Odne silt loam, 0 to 5 percent slopes	Not prime farmland	Non-irrigated Class 6	-			68.18	145.43	156.84	375.45			520.88
Powell silt loam, 0 to 8 percent slopes	Prime farmland if drained	Non-irrigated Class 3	Irrigated Class 3								21.55	21.55
Puyallup fine sandy loam, 0 to 3 percent slopes	All areas are prime farmland	Non-irrigated Class 3	Irrigated Class 3			4.14	6.50					6.50
Sara silt loam, 0 to 8 percent slopes	Prime farmland if drained	Non-irrigated Class 4	-			45.22	253.17	31.63	72.19			325.37
Sara silt loam, 30 to 50 percent slopes	Not prime farmland	Non-irrigated Class 7	-			19.43	44.43		1.40			45.83
Sara silt loam, 8 to 20 percent slopes	Not prime farmland	Non-irrigated Class 4	-			15.11	26.52		28.33			54.85
Semiahmoo muck	Prime farmland if drained	Non-irrigated Class 3	-	6.55	17.88					43.26	161.58	179.46
Semiahmoo muck, shallow variant	Prime farmland if drained	Non-irrigated Class 6	-	23.51	175.89					53.98	69.35	245.24
Tisch silt loam, 0 to 3 percent slopes	Prime farmland if drained	Non-irrigated Class 6	-								17.15	17.15
Washougal gravelly loam, 0 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-				14.12			10.08	10.08	24.20
Water	Not prime farmland	Water	-	5.98	5.98		5.02	1.59	2.77			13.78
Wind River gravelly loam, 0 to 8 percent slopes	All areas are prime farmland	Non-irrigated Class 2	-		0.15							0.15
Total				601.41	3,195.96	411.55	1,318.72	763.64	2,109.08	366.32	1,532.64	8,156.40

Soil Names, Classifications, Rural Industrial Land Bank Inventory Sites: Areas 1 through 4

Soil Name	Farmland Classification	Non-irrigated Classification	Irrigated Classification	Area 1		Area 2		Areas 3		Area 4		Total
				Site Specific	Total Area	Site Specific	Total Area	Site Specific	Total Area	Site Specific	Total Area	
	All areas are prime farmland			76%	67%	34%	38%	55%	48%	30%	10%	47%
	Prime farmland if drained			23%	22%	11%	19%	4%	3%	29%	20%	16%
	Farmland of statewide importance			0%	4%	21%	13%	12%	20%	0%	1%	9%
	Not prime farmland			1%	7%	34%	30%	29%	28%	41%	69%	28%
				100%	100%	100%	100%	100%	100%	100%	100%	100%
		Non-irrigated Class 1		39%	18%	0%	1%	1%	1%	5%	1%	8%
		Non-irrigated Class 2		9%	15%	0%	3%	6%	2%	13%	4%	8%
		Non-irrigated Class 3		28%	38%	54%	47%	60%	65%	24%	17%	43%
		Non-irrigated Class 4		0%	0.1%	16%	23%	12%	10%	0%	0%	6%
		Non-irrigated Class 5		0%	0%	0%	0%	0%	0%	0%	0%	0%
		Non-irrigated Class 6		22%	28%	19%	18%	21%	19%	58%	76%	33%
		Non-irrigated Class 7		0%	0.1%	10%	7%	0%	3%	0%	0%	2%
		Water		1%	0%	0%	0%	0%	0%	0%	1%	0%
				100%	100%	100%	100%	100%	100%	100%	100%	100%

APPENDIX B. SITE 1 (DOCKET) CRITICAL AREAS REPORT, ANCHOR QEA

See Alternative Sites Analysis Appendix C

APPENDIX C: CRITICAL AREAS REPORTS FOR DOCKET AND ALTERNATIVE SITES

CLARK COUNTY RURAL INDUSTRIAL LANDS BANK

SITE 1 CRITICAL AREAS EXISTING CONDITIONS, OPPORTUNITIES, AND CONSTRAINTS

Prepared for

Berk Consulting

Prepared by

Anchor QEA, LLC

421 SW 6th Avenue, Suite 750

Portland, Oregon 97204

February 2015

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Appendix A USFWS IPAC Species List
Appendix B USDA Soils Report

LIST OF ACRONYMS AND ABBREVIATIONS

CARA	Critical Aquifer Recharge Area
CCC	Clark County Code
County	Clark County
Ecology	Washington State Department of Ecology
ESA	Endangered Species Act
FPA	Forest Practice Application
IPaC	Information, Planning, and Conservation System
LiDAR	Light Detection and Ranging
NPDES	National Pollutant Discharge Elimination System
NWI	National Wetland Inventory
PHS	Priority Habitats and Species
RCW	Revised Code of Washington
RILB	rural industrial land bank
UGA	Urban Growth Area
USDA	U.S. Department of Agriculture
USFWS	U.S. Fish and Wildlife Service
WDFW	Washington State Department of Fish and Wildlife

1 INTRODUCTION AND OVERVIEW

This document provides an overview of existing habitat conditions at Site 1 to determine the presence of any designated or potential critical areas in support of the environmental review of Site 1 for the potential establishment of a rural industrial land bank (RILB) in Clark County (County), Washington. Site 1 comprises two properties separated by SR 503, which runs north/south between the properties (Figure 1). The property on the east of SR 503 is 378.71 acres (Lagler Property), and the property to the west of SR 503 is 234 acres (Ackerland Property). Each property comprises a number of parcels that range from 5 to more than 100 acres. Zoning and land use designations for the properties are fully described in the Draft De-Designation Checklist (Berk 2014).

On Tuesday, December 23, 2014, Anchor QEA scientists visited Site 1 (Ackerland and Lagler Properties) for the purposes of documenting existing conditions of habitat and natural resources to perform a Critical Areas Assessment per Clark County Code. The site visit was informed by publicly available information and maps showing potential environmental features and critical areas present on Site 1, as well as a review of County natural resource-focused regulations that may influence the classification or categorization of certain habitat features that may be present on Site 1 (e.g., wetlands and other critical areas and species). The County provides a map of "environmental constraints" for developers that identifies many of these critical areas and habitat features. The County environmental constraints map for the area of Site 1 is shown in Figure 2.

1.1 Overall Project Purpose Summary

The County is considering the establishment of a rural industrial land bank as provided in the Growth Management Act under Revised Code of Washington (RCW) 36.70A.367. The County received a docket application to establish the RILB on Site 1 within the Vancouver Urban Growth Area (UGA).

Presently, the zoning for both properties is Agriculture (AG-20). The zoning requested for approval is Light Industrial. Key steps in this process include identifying locations suited to major industrial use due to proximity to transportation or resource assets, identifying maximum size of the bank area, developing a programmatic environmental review with an

inventory of developable land and alternative sites inside and outside of UGAs, and development of comprehensive plan amendments and development regulations for the land bank.

1.2 Purpose of This Report

This document supports the development of the programmatic environmental review required as part of the evaluation of suitable lands for de-designation as agricultural and inclusion in the UGA as industrial lands. This document provides a description of existing site conditions based on a combination of information gathered during the December 23, 2014 site visit as well as review of other available information. This document also provides an overview of the existing conditions and determines if they would qualify for applicable elements of the County's current critical areas and water quality-related ordinances.

Section 2 summarizes the applicable County critical areas and water quality regulations and standards relevant to Site 1 that would regulate the classification of certain natural resources that may be present on the site, including wetlands and other types of regulated critical areas. This section also identifies the probable critical areas that are mapped on or near the site, based on information from the County (MapsOnline), and describes the information used by the County to create the map information.

Section 3 of this report describes existing habitat conditions encountered at Site 1 during the field visit on December 23, 2014. The determination of habitat and existing conditions encountered during the site visit was further verified with additional information sources (including the De-Designation Checklist and Inventory documents prepared for the RILB). The site visit also provided the opportunity to field-verify the presence of the critical areas that are shown in Figure 2.

Section 4 provides a summary analysis of potential opportunities and constraints for development of Site 1 based on the existing site conditions, including presence of potential critical areas.

This report is intended to support further County planning activity. It provides preliminary information about the presence and absence of potential critical areas and existing conditions of habitat on Site 1. It does not provide a formal wetland delineation, nor does it provide evaluation of local soils for the purposes of establishing feasibility of construction or engineering stability.

2 OVERVIEW OF APPLICABLE REGULATIONS AND MAPPED RESOURCES

Site 1 is located in Clark County, just outside of the Urban Growth Area (Figure 1). Based on review of the information compiled about Site 1 for the purposes of the De-Listing Checklist (Berk 2014), it was determined that although some critical areas were present on the site, mainly potential wetlands, the presence of other types of critical areas was likely to be low. For example, based on available information, it was presumed that Site 1 had a low potential for providing habitat to Endangered Species Act (ESA)-listed species. For these reasons, and additional site constraints identified for other areas being considered for de-listing, Site 1 was identified as likely having the least constraints.

Applicable regulations considered in the determination of existing conditions included the Clark County Critical Areas Code; surface water quality regulations, including stormwater management requirements; County tree protection requirements; and ESA/Priority Habitat and species presence in the County from lists developed by the U.S. Fish and Wildlife Service (USFWS), National Marine Fisheries Service, and Washington State Department of Fish and Wildlife (WDFW).

2.1 Clark County Critical Areas Code

The Clark County Critical Areas and Shorelines are addressed in Subtitle 40.4 of the Clark County Code (CCC). The Critical Areas Code contains information pertaining to identification of critical aquifer recharge areas (Chapter 40.410), identification of flood hazard areas (Chapter 40.420) and geologically hazardous areas (Chapter 40.430), habitat conservation for fish and wildlife (Chapter 40.440), wetland protection (Chapter 40.450), and the Shoreline Master Program (Chapter 40.460). Because Site 1 consists primarily of disturbed agricultural lands the most pertinent aspects of the Critical Areas Code for the purposes of the existing conditions determination for Site 1 were determined to be wetlands.

2.1.1 Critical Aquifer Recharge (Chapter 40.410)

The requirements in Chapter 40.410 regulate the types of activities that can be conducted in Critical Aquifer Recharge Areas (CARA). The CARA Category 1 and 2 lands on and around Site 1 were mapped as shown in Figure 3. According to the County map source information,

CARA Category 1 and 2 lands are based on hydrologic soils from U.S. Geological Survey and Group A Zones of Contribution around public well heads.

2.1.2 Flood Hazard Areas

Frequently flooded areas (flood hazard areas) were not identified via available maps for Site 1.

2.1.3 Geologic Hazard Areas

No geologic hazard areas were identified by County GIS to occur on or immediately adjacent to Site 1, although liquefaction may be a concern in the peat soils in the northeast corner of the eastern property of Site 1 (Su [Semiahmoo muck] Soils—See Appendix B for the U.S. Department of Agriculture [USDA] soil report map and data prepared for Site 1).

2.1.4 Habitat Conservation

Habitat conservation areas subject to regulation under Chapter 40.440 are mapped on a countywide basis. The habitat areas pertinent to Site 1 include Riparian Priority Habitat and areas within 1,000 feet of individual species point sites (i.e., Priority Species Buffer). These areas are shown in Figure 2.

Two Riparian Priority Habitat areas are located near Site 1 with small areas of overlap due to buffers. The nearest mapped Riparian Priority Habitat area overlaps slightly with the southeast corner of the property, and is based on buffer widths for open water habitats (Figure 2). The open water habitat is a maintained pond on separate property on the other side of NE 132nd Avenue. The other Riparian Priority Habitat area mapped in the vicinity of Site 1 is connected or adjacent to tributaries to Salmon Creek near the intersection of SR 503 and the railroad tracks on the northern portion of the site (Figure 2). Similar to the southeastern area, this area is separated from Site 1 by a road, NE 149th Avenue.

The Priority Species Buffer conservation area shown in Figure 2 is a 1,000-foot buffer around a bald eagle nesting site identified by WDFW. The nest is located on separate adjacent property north of the forested area in the northeast corner of Site 1. The 1,000-foot buffer for this nest is shown to slightly overlap with Site 1 (Figure 2).

2.1.5 Wetland Protection—Including Ratings and Buffer Determinations

Wetlands protection is implemented through CCC 40.450 at the county level. The wetlands identified by County GIS sources are based on the USFWS National Wetland Inventory (NWI). The NWI reports the extent and characterization of the nation's wetlands and deep water habitats based on a combination of Light Detection and Ranging (LiDAR) data and soil information. According to County staff, the County's wetland dataset is primarily derived from NWI data and is the primary resource used for initial determination of potential wetland impacts for development applications. This dataset is updated and supported by field verifications, delineations, and inventories conducted at the local level, such as the 1999 update by the County targeting specific areas of development or conservation (Renfrow 2014). The wetlands mapped by the County's updated NWI dataset are shown as part of the environmental constraints for the site in Figure 2 and do not include any wetlands that have been field verified. The soils for Site 1 were mapped in a soils report prepared by USDA (Appendix B) and were used as a reference for reviewing the wetland maps and site conditions.

CCC 40.450.020 requires the use of Washington State Department of Ecology's (Ecology) 2004 rating system. However, Ecology issued 2014 wetland rating forms for use in western Washington, effective January 1, 2015. Because CCC specifically states that the 2004 rating system is to be used, Ecology will accept use of the 2004 rating system for the County. For the purposes of this evaluation, both the 2004 and 2014 rating forms will be used to evaluate existing conditions of potential wetland areas for purposes of completeness.

In CCC, the classification of the wetland along with the functions provided by the wetland and the class of land use in the vicinity of the wetland are considered in the determination of the appropriate buffer width for wetlands (as in CCC Tables 40.450.030-2, -3 and -4). CCC provides further information about mitigation requirements based on the wetland rating and extent of the wetland buffer. The goal is to compensate for wetland impacts that will occur, after efforts to minimize impacts have been exhausted. The County's preference is for mitigation to occur on site, within the same watershed, or through the purchase of approved

and appropriate mitigation banking credits. The standard wetland mitigation ratios are provided in CCC 40, Table 40.450.040-1.

2.1.6 Shoreline Management Plan

Salmon Creek is northwest of Site 1 and has shorelines managed under the County's Shoreline Management Plan (Contained in Chapter 40.460). The shoreline management areas are generally shown as part of the environmental constraints for the site (Figure 2). None of the designated shoreline zones of Salmon Creek overlap with Site 1.

2.2 Water Quality and Stormwater

Management of water quality and stormwater contributions may be a consideration for development within Site 1. Factors to be considered regarding water quality and stormwater include the presence of CARA Category 2 lands on site (Figure 3); the extensive drainage features of the eastern property within the China Ditch watershed; and the surface water contribution of the western property to Salmon Creek, which is designated critical habitat for ESA-listed salmonids.

2.2.1 Water Quality

CCC Chapter 13.26A governs surface water quality in the County and applies to the discharge of contaminants to surface water, stormwater, and groundwater and requires certain sites and activities to utilize best management practices as set forth in CCC Section 13.26A.035 and stormwater facility maintenance practices set forth in Section 13.26A.040. Based on review of aerial imagery from Google Earth, ponded water often occurs within vegetated pastures of the eastern property. County, state, and federal maps show a drainage connection from the secondary lagoon of the eastern property to the drainage district 5 (China Ditch) ditches. Figure 4 shows the lagoons relative to the local drainage catchments, and Figure 6 shows the connection which appears on the County's maps.

2.2.2 Stormwater Management

CCC Chapter 40.385 (update will be Chapter 40.386) covers stormwater and erosion control and applies to all new development, redevelopment, land disturbing activities, and drainage

projects. The goal of this chapter is to protect surface and groundwater quality for drinking water supply, recreation, fishing, and other beneficial uses. The County will be updating its stormwater code in the next year to comply with its National Pollutant Discharge Elimination System (NPDES) permit. The County indicates that it is pursuing updates, including making low impact development[1] the mandatory approach for stormwater management in site development (Clark County 2014).

2.3 Other Potentially Applicable County Regulations and Requirements

2.3.1 Forest Practices

Forest Practice Applications (FPAs) are regulated through the Washington State Forest Practices Act in RCW 76.09 and CCC 40.260.080. These codes are used to prevent potential adverse impacts from logging on critical areas. The forest practices permit may be applicable to any clearing or development resulting in removal of large stands of trees.

2.3.2 Conservation Areas

County GIS data shows that a portion of the western property has been identified as a potential acquisition for conservation purposes (Figure 5). The data used by the County for this map indicates that this area is based on "Conservation Real Estate Excise Tax (REET) areas identified through overlays of floodplain, wetlands, and priority habitat data" and was documented in 2006 (Clark County GIS 2006). There was no indication found in publicly available County GIS or comprehensive planning documents that an active planning process is in place to move forward with acquisition for conservation purposes.

2.4 ESA or Priority Habitat Species Considerations

A list of ESA-listed and sensitive or priority species known to occur or having the potential to occur in the County was obtained through the USFWS IPaC (Information, Planning, and Conservation System) website. This is a preliminary list of species that should be considered for any development action proposed to occur in the County and not necessarily a list of

[1] From the updated Stormwater Manual (Clark County 2014; Chapter 40.386): "Low impact development" means a stormwater management strategy that emphasizes conservation and use of existing natural site features integrated with distributed, small-scale stormwater controls to more closely mimic natural hydrologic patterns in residential, commercial, and industrial settings.

species that would likely occur at Site 1 (Appendix A). A preliminary review of this list, based on known habitat requirements for these species, leads to the conclusion that none of the species identified in this list would occur on Site 1. Designated critical habitat for ESA-listed salmon species occurs in Salmon Creek to the north of Site 1.

3 SITE 1 CRITICAL AREAS AND EXISTING HABITAT CONDITIONS

Prior to completing the site visit, Anchor QEA reviewed the mapping provided in the De-designation checklist, as well as maps created from the County's GIS mapping service (MapsOnline) and Google Earth aerial imagery. The site visit was completed on Tuesday, December 23, 2014. Significant rainfall occurred in the Portland-Vancouver region over the preceding weekend, and ponded water was evident in certain locations throughout the eastern property and, to a lesser extent, the western property.

3.1 Site Setting

Site 1 is an active dairy, with associated operations occurring on both the eastern and western properties. The dairy operation includes several hundred adult cows, none of which were utilizing pasture during the time of the visit due to wet field conditions. Most of the land in Site 1 is undeveloped and has been in use as a dairy for at least 50 years. The existing buildings and structures on Site 1 properties include buildings related to dairy operations and residences.

There are multiple natural resource areas surrounding Site 1 that were noted but not evaluated as part of this effort. The County has mapped riparian conservation habitat along Salmon Creek, roughly located north and west of Site 1 (Figure 2). This riparian conservation habitat is associated with the shoreline management area and mapped consistent with the County's critical area ordinance habitat conservation areas and shoreline management plan. The area was established to provide riparian and upland habitats for migratory birds, threatened and endangered species, fish, and other resident wildlife. An active bald eagle roost site is adjacent to the forested area in the northeast corner of the eastern property, and the regulated buffer for this site slightly overlaps Site 1 in this northeast corner. In addition, WSDOT owns a stormwater management feature just off site of the southern portion of the parcel on the eastern side of SR 503 (Figure 4).

The land within Site 1 consists of varied subtle topography, with the eastern parcel having more varied topography approaching SR 503, and the western parcel being more predominantly flat. The site elevations range from approximately 290 feet at the eastern edge to 294 feet at the western edge. The properties of Site 1 drain to two different drainage basins; the western property drains to the Salmon Creek watershed, and the eastern property primarily drains to the

China Ditch system. As previously mentioned, SR 503 runs generally north-south and divides the two properties. There is a railroad line that bisects the western property on an approximately north-south alignment. No other right of way or public roads bisect the properties, but there are access paths created by farm equipment through ongoing use.

The vegetation present around Site 1 is generally typical of land that has been in cultivation or utilized as livestock pasture for decades. The eastern and western properties are operated together as the Lagler dairy. The Lagler dairy provides its milk products to the Tillamook Cooperative. The western (Ackerland) property provides hay/silage for animal feed, and the dairy operations, hay production, and pasturing occurs on the eastern (Lagler) property. The vegetation across all of Site 1 is predominantly cultivated species used for pasture, hay, and silage. There is a small, forested area in the northeast corner of the eastern property, which is described in more detail in Section 3.2.4. A few trees and primarily weedy non-natives (e.g., blackberry) are growing in the ditches alongside SR 503 and the railroad alignment.

Many of the adjacent or neighboring parcels to the north, west, and east are either active farmlands, large parcel residences, or other open space. These parcels have similar, or better, natural habitat values. The cultivated fields and pasture areas of Site 1 and surrounding areas likely provide habitat for a typical suite of mammals associated with rural and agricultural lands, including mice, voles, skunk, raccoon, coyote, and opossum. Deer, songbirds, raptors, waterfowl, and small mammals likely utilize Site 1, as well as adjacent and surrounding agricultural lands, for foraging and resting or as travel corridors between habitat associated with Salmon Creek and larger wetland areas. Properties to the south are generally more developed because they are in or near the urban growth boundary and are, therefore, less likely to provide similar habitat value.

Concentrations of waterfowl may be found throughout the region at certain times of the year, and some of these bird species may also make use of the agricultural fields, wet areas, ponds, and drainage ditches on and adjacent to Site 1.

Table 1 identifies wildlife species identified through visual observation, calls, or other evidence noted during the site visit.

Table 1
Species Presence Noted on Site 1

Common Name	Species Scientific Name
Canada Goose	*Branta canadensis*
Mallard	*Anas platyrhynchos*
Northern Pintail	*Anas acuta*
Green-winged Teal	*Anas crecca*
Northern Harrier	*Circus cyaneus*
Red-tailed Hawk	*Buteo jamaicensis*
Wilson's Snipe	*Gallinago delicata*
Rock Pigeon	*Columba livia*
Mourning Dove	*Zenaida macroura*
Anna's Hummingbird	*Calypte anna*
Red-breasted Sapsucker	*Sphyrapicus ruber*
American Kestrel	*Falco sparverius*
Western Scrub-Jay	*Aphelocoma californica*
Northwestern Crow	*Corvus caurinus*
Common Raven	*Corvus corax*
Barn Swallow	*Hirundo rustica*
Black-capped Chickadee	*Poecile atricapillus*
Bushtit	*Psaltriparus minimus*
Pacific Wren	*Troglodytes pacificus*
Golden-crowned Kinglet	*Regulus satrapa*
Ruby-crowned Kinglet	*Regulus calendula*
European Starling	*Sturnus vulgaris*
Spotted Towhee	*Pipilo maculatus*
Song Sparrow	*Melospiza melodia*
Dark-eyed Junco	*Junco hyemalis*

Evidence of Species	Species Scientific Name
Coyote scat and fur	*Canis latrans*
Owl pellets (Barred or Great Horned due to size)	*Strix varia/Bubo virginianus*
Deer scat	*Odocoileus hemionus columbianus*
Deer browse and tree rubs	*Odocoileus hemionus columbianus*
Nutria burrows	*Myocastor coypus*

3.2 Critical Area, Habitat, and Existing Conditions

This section discusses the critical areas that were mapped on Site 1, as well as other important features relevant to determining existing conditions. Regulated critical areas that were not mapped to occur on Site 1 are not specifically described here (such as frequently flooded areas).

3.2.1 Critical Aquifer Recharge Areas

The pastures and fields of Site 1 are extensively managed to control surface water through drain tile in certain parcels (per description provided by property owner) and maintenance of the District 5 drainage system on the eastern property. The property owner also actively manages nutrients through containment and reapplication of manure on site according to permitted conditions. The property owner acknowledged use of herbicides on the pasture and hay-growing fields, which should be further evaluated for impacts in future site investigations. Site 1 land use appears to be consistent with requirements for the Category 2 designated CARA lands.

3.2.2 Geologic Hazards

As mentioned in Section 2, liquefaction may be a concern in the peat soils (Semiahmoo muck) in the northeast corner of Site 1 (as shown in soil maps in Appendix B). The presence of these soils in this area was confirmed during the site visit by visual observation of vegetation community patterns as well as soil augering to a depth of 46 inches.

3.2.3 Wetlands

The County wetland mapping (Figure 2) identified numerous wetland features on both parcels of Site 1. The eastern property, in particular, is actively managed to limit the ponding of surface water and promote drainage through soil leveling and clearing drainage ditches. There are also drainage features located on the western property, but these appear to require less maintenance.

Based on the high level of disturbance throughout Site 1 due to ongoing agricultural practices and management of surface water through drainage ditches and drain tile, most of the

wetland areas identified from the County via NWI sources and presented in Figure 2 did not appear to have wetland soils, hydrology, or vegetation during the site visit, nor upon review of several years' worth of aerial imagery. Additional data collection or formal delineations should be conducted to confirm presence or absence of wetlands and determination of wetland boundaries.

Two large ponded water areas exist on the eastern property near the barns and are shown in Figure 2 as the largest wetland area. These ponded areas are associated with manure management practices, which the property owner indicated is essentially a closed loop system, with water and solids being reapplied to fields or other on-site uses. The smaller of the ponded areas serves as the primary treatment lagoon, and the larger is the secondary treatment lagoon (Figure 4). The property owner indicated that the secondary lagoon was initially a pond that was excavated prior to use decades ago and that the bottom is entirely clay, preventing any infiltration. The primary treatment lagoon is a man-made feature, constructed more recently. It is an elevated containment basin, configured to allow for lining material (clay material sources on site) and placement above the water table. Water from the lagoons may be utilized for flushing the manure from the barns and may also be applied to pasture lands. Solids from the treatment lagoons are excavated every other year and applied to pasture and hay fields. Prior to conveyance to the treatment lagoons, some manure solids bypass the lagoons and are composted, for use on site or for sale. The secondary lagoon may have a connection to the drainage ditches of China Ditch/Drainage District 5 based on mapping (Figure 6), but no visual connection was observed during the site visit

3.2.3.1 Condition and Classification of Potential Wetland Areas

As previously mentioned, due to the intensity of land management at Site 1, wetlands as mapped in the NWI and County dataset appeared significantly different than conditions encountered in the field, where the distribution of potential wetland areas appeared much more limited.

Based on the conditions encountered during the field visit, the Site 1 USDA soils report (Appendix B) was used to further inform the identification of areas that were more likely to

have wetland characteristics. Isolated patches of Semiahmoo muck are found within the parcel east of SR 503. McBee Silt Loam is very common and borders most of the muck patches. As noted in the USDA soils report in Appendix B, McBee Silt Loam is suitable for agriculture if well drained or modified, and the site visit and communication with the property owner indicate that this area is both drained and modified. The property owner identified parcels where drain tiles had been installed, and these correspond to most of the McBee Silt Loam areas mapped in the soils report.

Figure 7 identifies areas that appeared to have potential wetland features based on the information gathered during the field visit, information on soil types, and review of aerial imagery. There may be potential wetlands associated with muck soils on the eastern property adjacent to drainage ditches. These would likely be categorized as Depressional Category III wetlands (46 points using the 2004 rating system; 18 points using the 2014 rating system[2]). Potential wetland areas associated with McBee Silt Loam and not connected to ditches as shown in Figure 7 would likely be categorized as Depressional Category III wetlands (36 points using the 2004 rating system; 16 points using the 2014 rating system). None of the potential wetlands identified in Figure 7 would rate well for habitat function or water quality. However, these ratings are preliminary and subject to change based on a formal delineation of the site and additional information, such as the downstream basin flood regime. Further site study will be required to make definitive determinations on wetland presence or absence, as well as potential wetland boundaries for the determination of wetland buffer widths.

The open water ponds utilized for manure management should also be delineated and rated separately. This process would be supported through more definitive information about their underlying soils, drainage, and overall function.

3.2.4 Presence of Other Important Habitat Types

The forested area in the northeast corner of the eastern property is a mature forest, which includes a number of deciduous and coniferous tree species (Table 2). Most of the tree

[2] As previously noted, both the 2004 and 2014 rating forms were used based on the codified requirement to use the 2004 wetland rating version.

species are native species that would likely occur at this location and some tree species were planted by the property owner. Within the mature forest patch is a grove of Oregon white oaks (*Quercus garryana*). The number of oak trees and the size of some of the oaks (greater than 25-inches diameter at breast height may qualify this area as an oak woodland and possibly a Non-Riparian Priority Habitat and Species (PHS) area as defined by WDFW.

The size and number of conifers present in the northeast corner of the eastern property of Site 1 may require a Forest Practices Permit for future development actions, and the species composition and individual tree size and condition should be documented in a future site assessment. The size of these trees may also trigger mitigation requirements for removal if they are determined to be located within a wetland buffer. There is also a grove of oak trees adjacent to and within this stand that requires additional assessment and survey because the size of the individual trees would trigger a preservation/mitigation plan if they were proposed to be removed.

Table 2
Tree Species Identified in Northeast Corner of Site 1

Species Common Name	Species Scientific Name
Big-leaf maple	*Acer macrophyllum*
Red alder	*Alnus rubra*
Cottonwood	*Populus trichocarpa/balsamifera*
Douglas fir	*Pseudotsuga menziesii*
Oregon white oak	*Quercus garryana*
Redwood	*Sequoia sempervirens*
Giant sequoia	*Sequoiadendron gigantea*
Western red cedar	*Thuja plicata*
Western hemlock	*Tsuga heterophylla*

This forested area likely provides nesting and denning habitat to birds and small mammals and is likely used by other wildlife as it presents refuge and foraging opportunities along potential movement, foraging, or migration corridors. This are may be strongly suited for potential use as a mitigation area for other on-site impacts.

3.3 Surface Water

According to the property owner, the site is extensively drained as noted above. Drain tiles may be located under most of the McBee Silt Loam and muck soils in the north and east of the eastern property. Drain tiles were also installed in one drainage swale of the western property. The area managed with drain tiles, as described by the property owner during the field visit, is shown in Figure 7. Ponded water was noted particularly in paddocks on the eastern parcel, where cattle compaction of soils might be an issue.

Nutria burrows and potential dens were observed in and near the Drainage District ditches. Nutria may have a detrimental impact to water quality and native plants due to erosion and contribution of additional soils to the runoff from adjacent wetlands and uplands.

3.4 Identification of ESA or Priority Species Presence

No ESA or priority species are known to utilize habitat in Site 1 for breeding or roosting habitat based on PHS mapping. As noted in Section 2, a bald eagle nest is shown on PHS maps occurring in a stand of trees to the north of Site 1 (off site; Figure 2), and this was noted by the property owner. A list of the species noted during the site visit is provided in Table 1.

The western property of Site 1 drains to the Salmon Creek basin, which is designated critical habitat for ESA-listed salmon species. Drainage swales and culverts were noted during the site visit, and the connection to Salmon Creek appears to remain intact. Development within the western property, particularly development that creates new impervious surface with runoff, may trigger ESA Section 7 review due to this hydrological connection.

4 OPPORTUNITIES AND CONSTRAINTS BASED ON CRITICAL AREAS CONDITIONS AND CURRENT REGULATORY REQUIREMENTS

Based on the review of available information about the site and the conditions encountered in the field, existing conditions of Site 1 are generally consistent with conditions expected to be encountered in a well-maintained operational agricultural site. The primary potential impact to critical areas and existing habitat from development at Site 1 would be the fill of wetlands and development of impervious surfaces draining to Salmon Creek. The existing conditions of some potential wetland areas identified during the site visit indicate that certain wetland areas on Site 1 would be well suited to restoration; therefore, on-site mitigation of potential wetland impacts could be considered, and implementation of low impact development standards and other stormwater best management practices could limit any potential concerns related to Salmon Creek.

While the County wetlands mapping shows numerous depressional wetland features scattered across much of the site, it is likely that actual delineated wetland area may be significantly less concentrated throughout the site, as shown in Figure 6; however, the extent of wetlands on Site 1 cannot be determined without completion of a full wetland delineation. Filling wetlands and wetland buffers at Site 1 would impact surface water quality and, to a lesser extent, habitat functions. Due to classification of the wetlands that would likely be delineated for Site 1 (Category III), wetland buffers of 40 to 60 feet would likely be established based on current site use. Mitigation would be required for future development-related impacts to wetlands and wetland buffers. It is possible, given site conditions, that impacts to wetlands on the site could be minimized through site design considerations, pursuant to the requirements of CCC. Unavoidable impacts can be offset through compensatory mitigation.

The wetland/forest area in the northeast corner of Site 1 is highly suited for restoration and could provide an opportunity to offset impacts to wetlands elsewhere on site, particularly given the County's preference for on-site mitigation. In addition, there are numerous wetland mitigation banks in southwest Washington and the County, with additional banks in the planning stages. While CCC indicates a preference for compensatory mitigation of wetland impacts to occur on site, there would likely be wetland mitigation banks with

suitable credits available for purchase at the time of future development and a combination of on-site and bank credits would likely fulfill mitigation requirements.

Should the future development plans for Site 1 include clearing or other disturbance within the northeast forested area, additional regulatory review may be required and certain characteristics of this area may need to be more fully described and documented to determine whether this area contains Priority Habitat based on WDFW and County definitions. The County's initial review indicated the following:

1. The northeastern patch of forest is approximately 6.9 acres in size; therefore, it does not meet the size threshold to meet the definition of Old Growth/Mature Forest Priority Habitat. The understory can be characterized as degraded as a result of grazing. This grazing has altered the area to the extent that the forested area does not meet the County's definition of Biodiversity Areas and Corridors.
2. The western portion of this forest is likely to contain wetland buffers, which would be protected critical areas.
3. In "Urbanizing Areas," individual oaks of significant size or in a mature age class, or groups of oaks that form stands with at least 25% canopy cover of Oregon White Oak, meet the definition of Oregon White Oak Woodlands Priority Habitat. Other tree species that are associated with Oregon White Oaks or White Oak stands may also be included in the habitat area. Based on the proximity of the site to the UGA and the purpose of the study, WDFW would likely classify the site as an "urbanizing area" for the purpose of designating Oregon White Oak Woodland Priority Habitat.
4. Any forest practice on the site would likely be classified as a Class IV G, which would need to comply with the County's Critical Areas ordinances; unless the property is in, and intended to remain in, either Designated Forest Land or Current Use Timber property tax status.

Based upon the County's characterization, this area should be more fully surveyed for tree size and canopy cover to determine whether the site may be designated Oregon White Oak Woodland Priority Habitat and to determine the appropriate compliance requirements under the County's Critical Areas ordinances.

Future development in Site 1 that creates new impervious surfaces may be subject to implementation of low impact development standards for the management of stormwater contributions. The County is currently preparing updates to their NPDES stormwater municipal permit manual, and the County's stormwater municipal permit is in effect through 2018. There may be an opportunity to maintain the existing manure management lagoon system and utilize it for stormwater management, pending a formal delineation and rating of these features.

Development in the western property that results in new impervious surface may trigger ESA Section 7 consultation due to the hydrologic connections to Salmon Creek, which is designated critical habitat for protected salmon species. On-site treatment and infiltration of stormwater may be preferable on this property, pending requirements associated with the County's stormwater manual as well as requirements related to CARA Category 2 lands that occur on this property.

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FIGURES

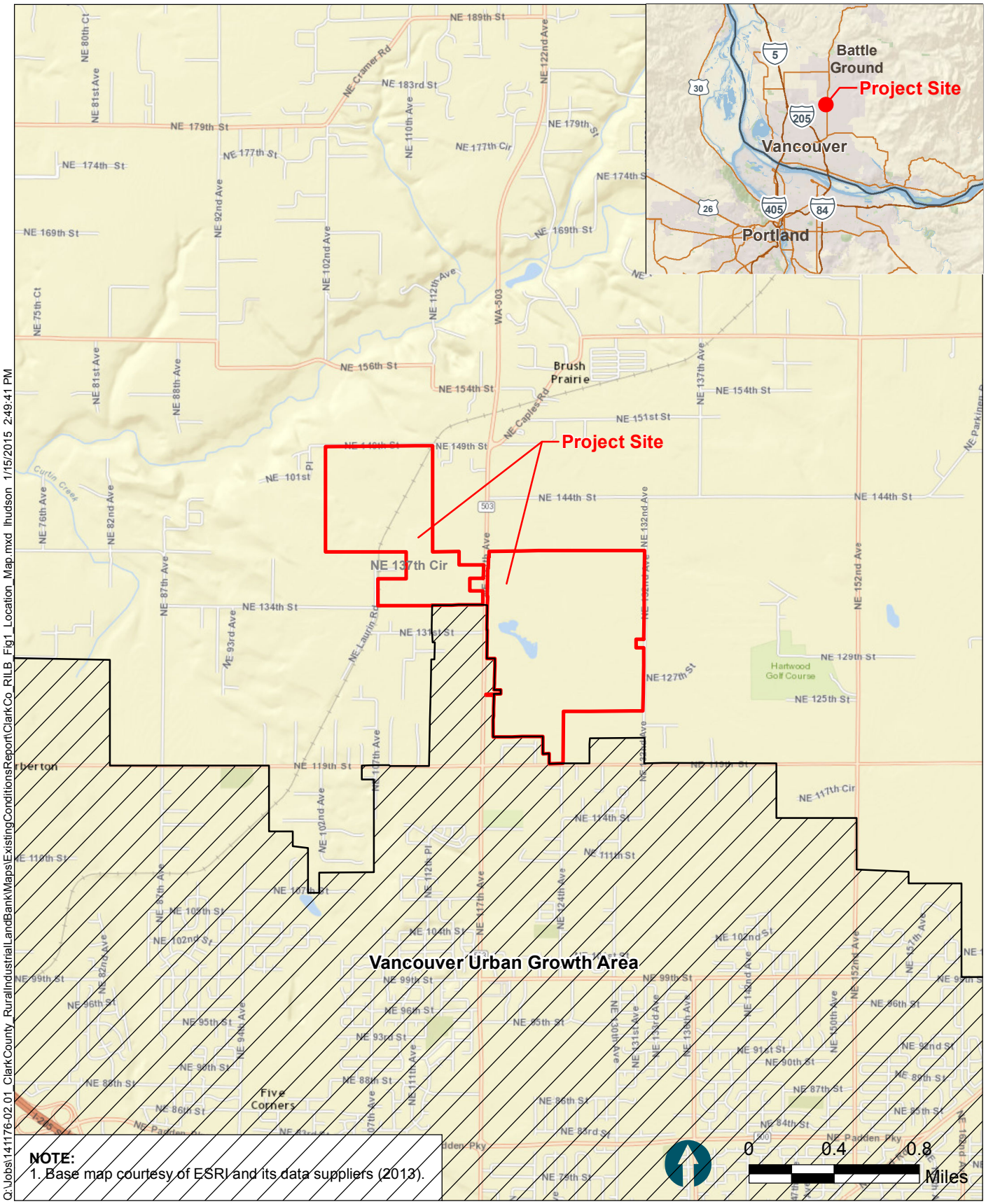

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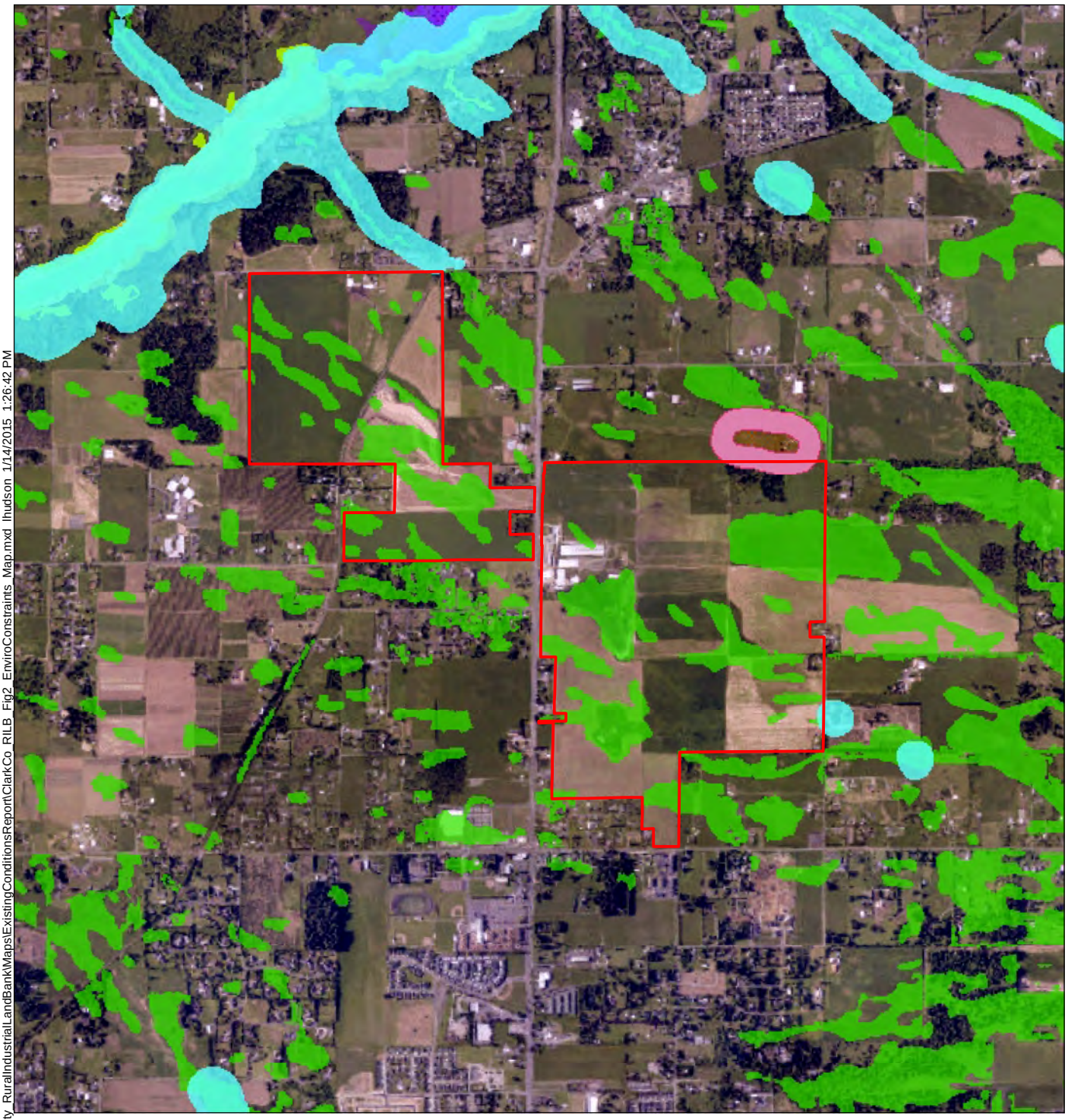
Figure 1
Location Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank



Project Site Boundary
Wetlands Presence
Priority Species Buffer

Priority Habitat and Species
Non-Riparian Habitat Conservation Area
Species Area
Riparian Habitat Conservation Area

Shoreline Designation
Rural Conservancy Residential
Rural Conservancy Resource Land

0 0.25 0.5 Miles

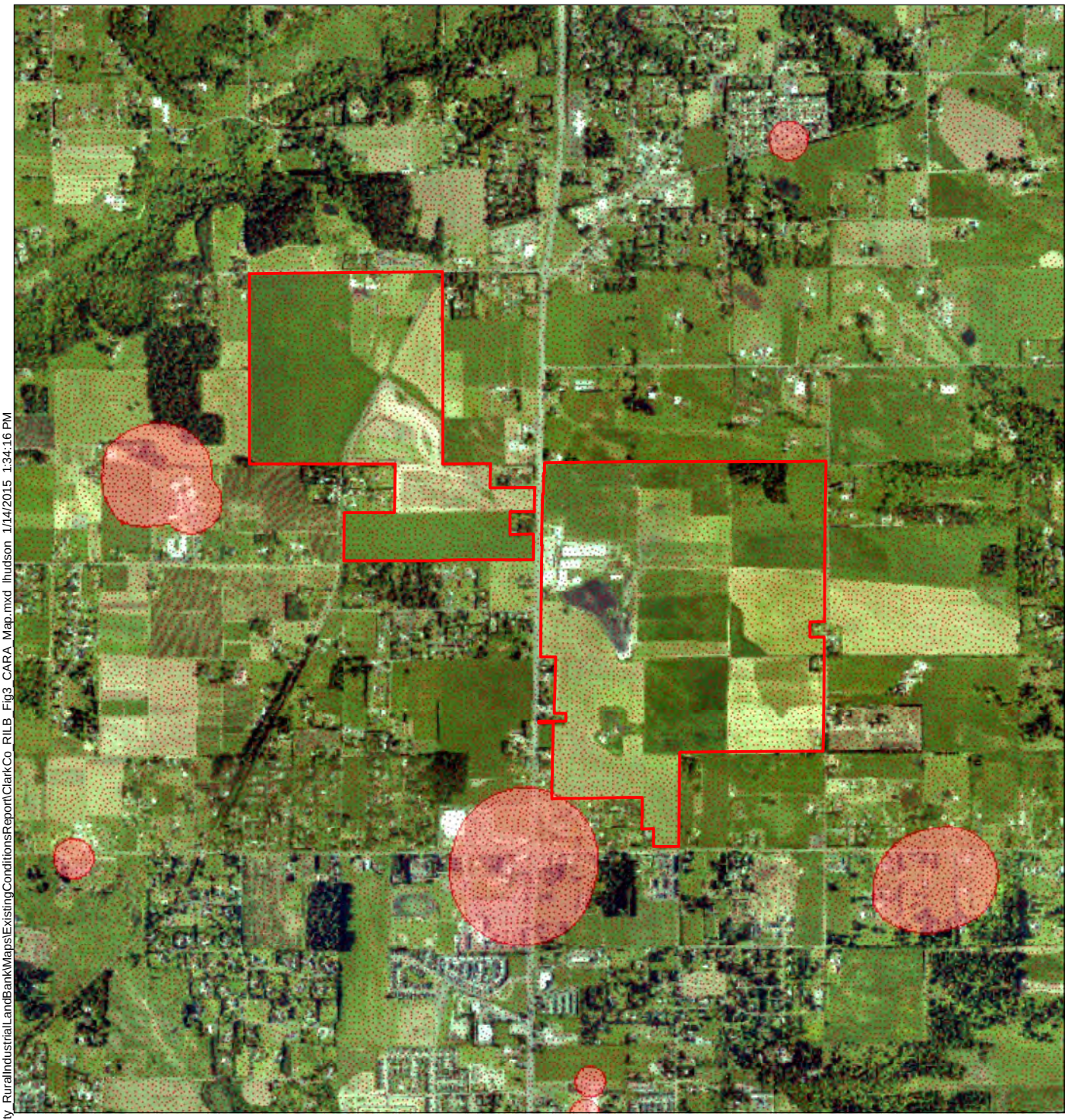
NOTE:
1. Background image acquired from Clark County, WA. GIS "Maps Online" website (accessed January 2015). Map image is georeferenced.

Q:\Jobs\141176-02.01_ClarkCounty_RuralIndustrialLandBank\Maps\ExistingConditionsReport\ClarkCo_RILB_Fig2_EnviroConstraints_Map.mxd lhudson 1/14/2015 1:26:42 PM

DRAFT

ANCHOR QEA

Figure 2
Environmental Constraints Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank



Project Site Boundary

Critical Aquifer Recharge Area

Category 1 Recharge Area

Category 2 Recharge Area

NOTE:
1. Background image acquired from Clark County, WA. GIS "Maps Online" website (accessed January 2015). Map image is georeferenced.

0 0.25 0.5 Miles

Q:\Jobs\141176-02.01_ClarkCounty_RuralIndustrialLandBank\Maps\ExistingConditionsReport\ClarkCo_RILB_Fig3_CARA_Map.mxd lhudson 1/14/2015 1:34:16 PM

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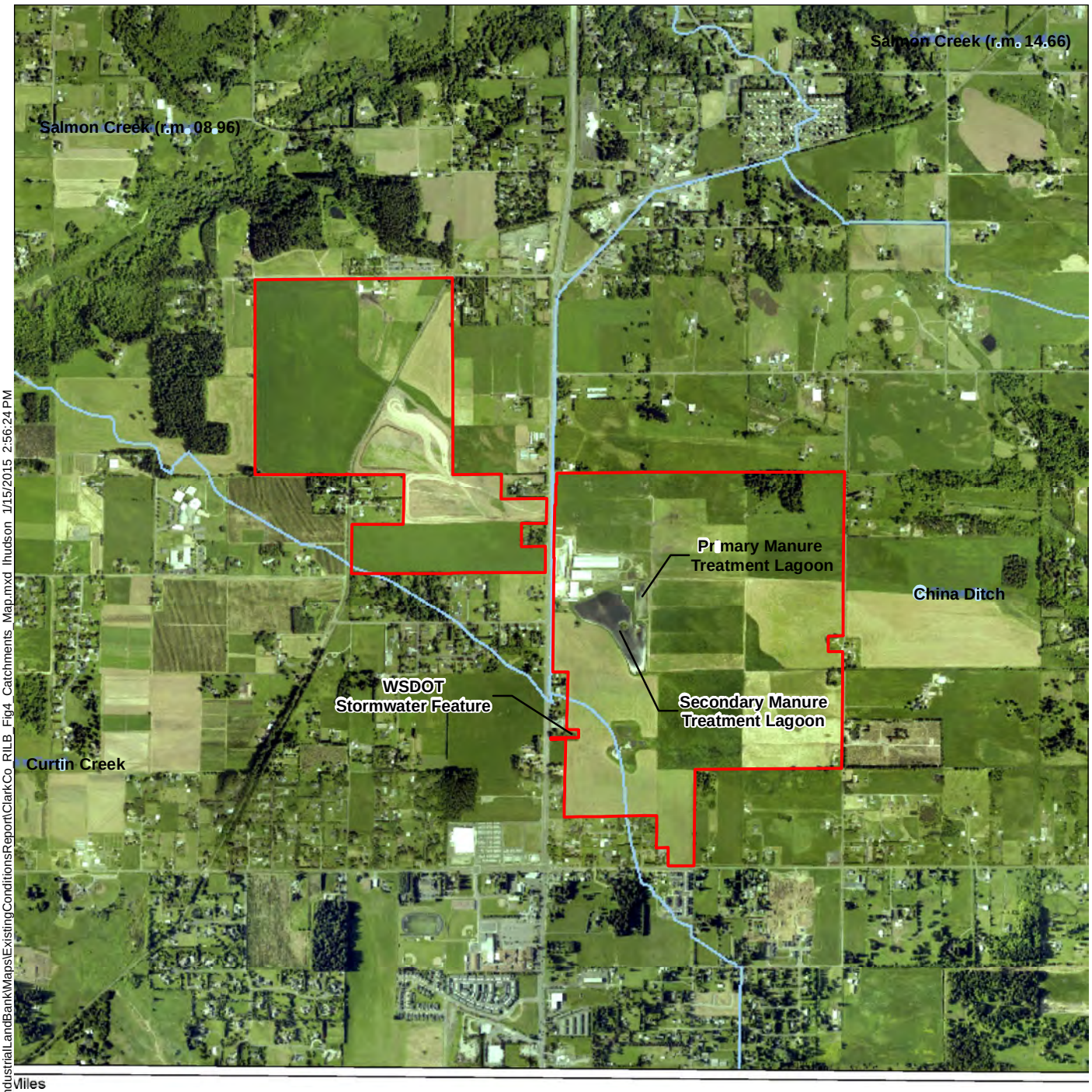
ANCHOR QEA

Figure 3
Critical Aquifer Recharge Areas Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank



Miles

This map was generated by Clark
does not warrant the accuracy, re
map, and shall not be held liable

Project Site Boundary

Sub-Watershed

NOTE:
1. Background image acquired from Clark County, WA. GIS "Maps Online" website (accessed January 2015). Map image is georeferenced.

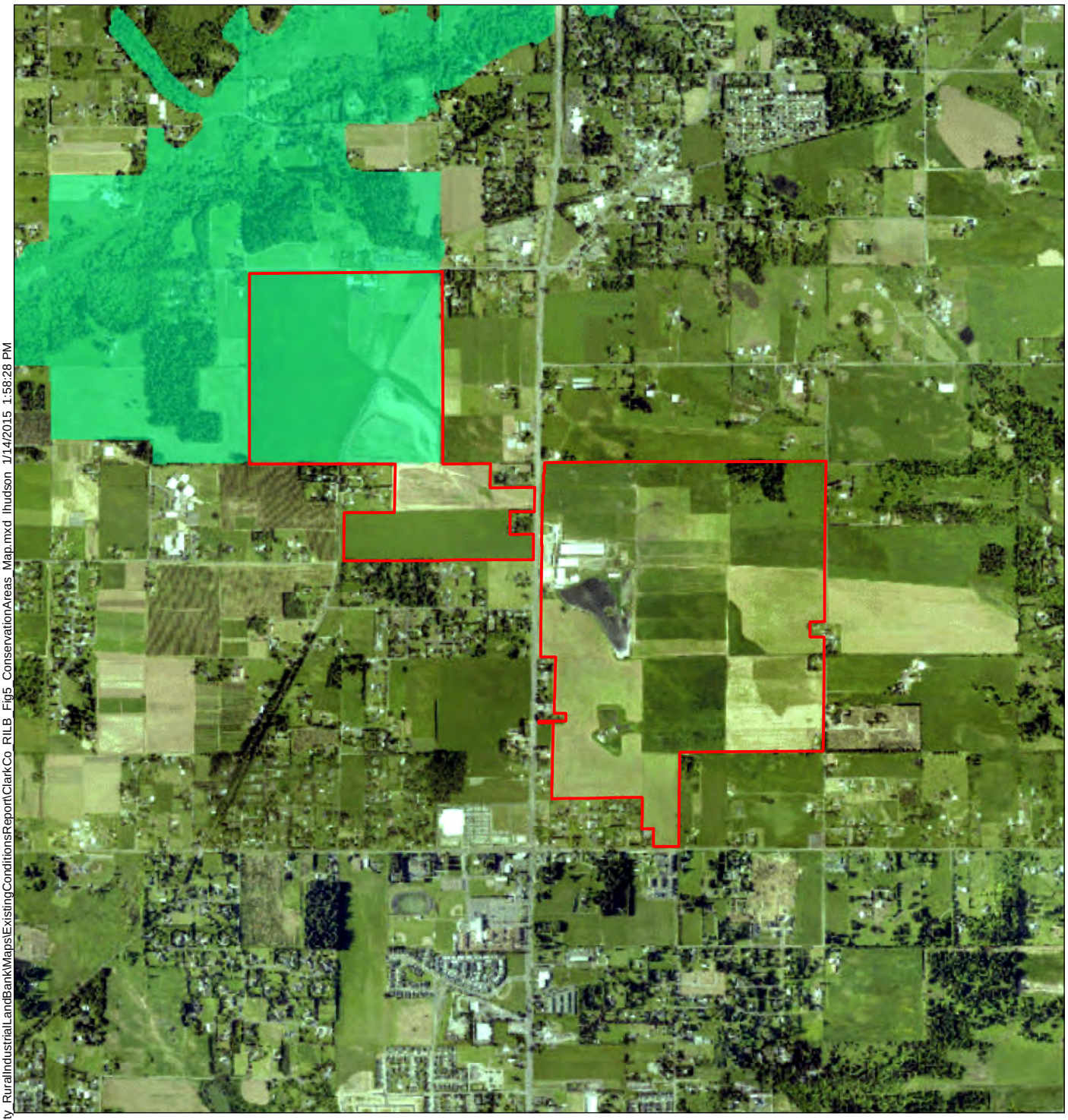
0 0.25 0.5 Miles

Q:\Jobs\141176-02.01_ClarkCounty_RuralIndustrialLandBank\Maps\ExistingConditionsReport\ClarkCo_RILB_Fig4_Catchments_Map.mxd lhudson 1/15/2015 2:56:24 PM

DRAFT

ANCHOR QEA

Figure 4
Catchments Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank



Project Site Boundary

Conservation Plan Acquisition

NOTE:
1. Background image acquired from Clark County, WA. GIS "Maps Online" website (accessed January 2015). Map image is georeferenced.

0 0.25 0.5 Miles

Q:\Jobs\141176-02.01_ClarkCounty_RuralIndustrialLandBank\Maps\ExistingConditionsReport\ClarkCo_RILB_Fig5_ConservationAreas_Map.mxd lhudson 1/14/2015 1:58:28 PM

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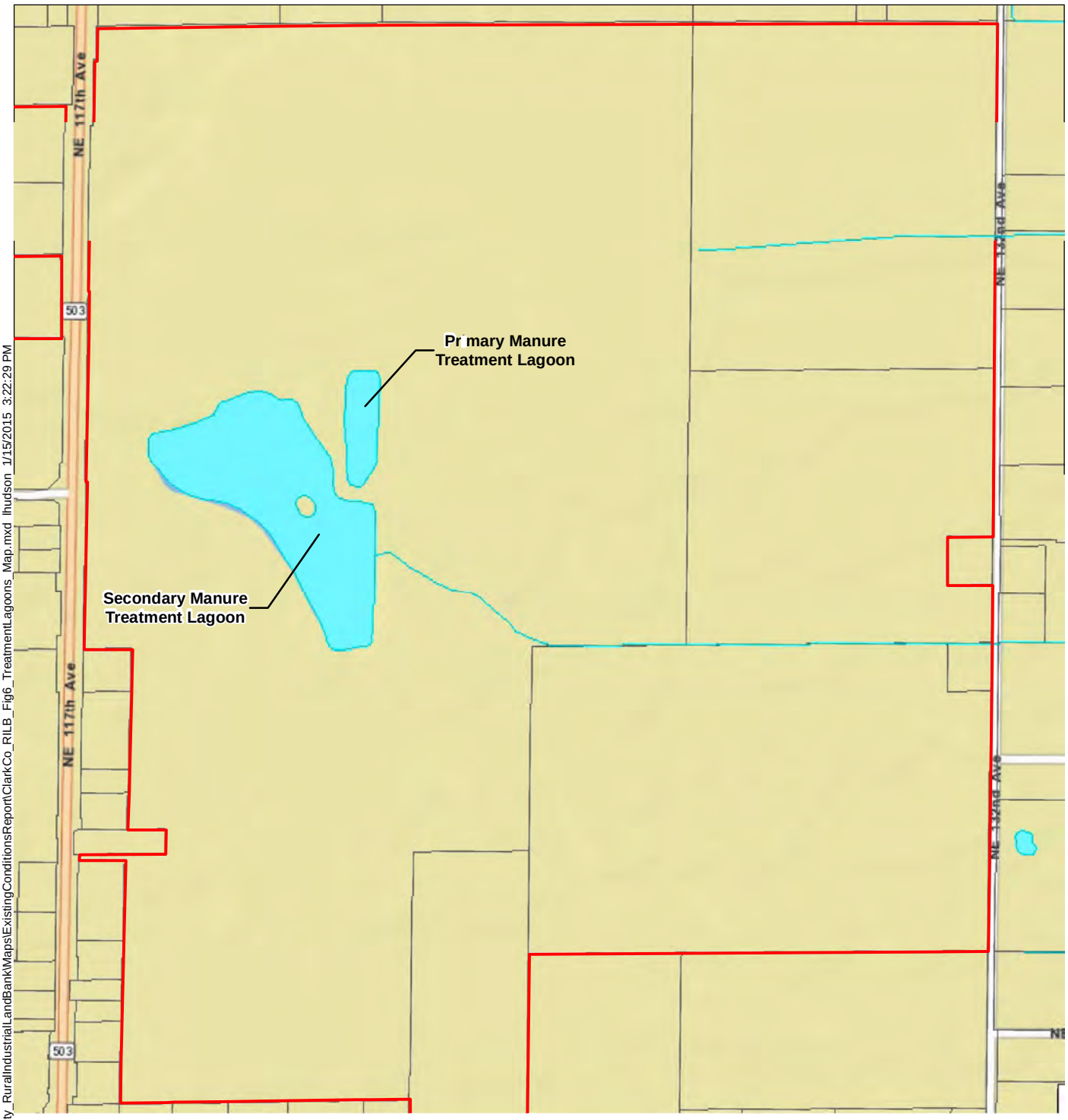
ANCHOR QEA

Figure 5
Proposed Conservation Acquisition Areas Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank



NOTE:
1. Background image acquired from Clark County, WA. GIS "Maps Online" website (accessed January 2015). Map image is georeferenced.

Q:\Jobs\141176-02.01_ClarkCounty_RuralIndustrialLandBank\Maps\ExistingConditionsReport\ClarkCo_RILB_Fig6_TreatmentLagoons_Map.mxd lhudson 1/15/2015 3:22:29 PM

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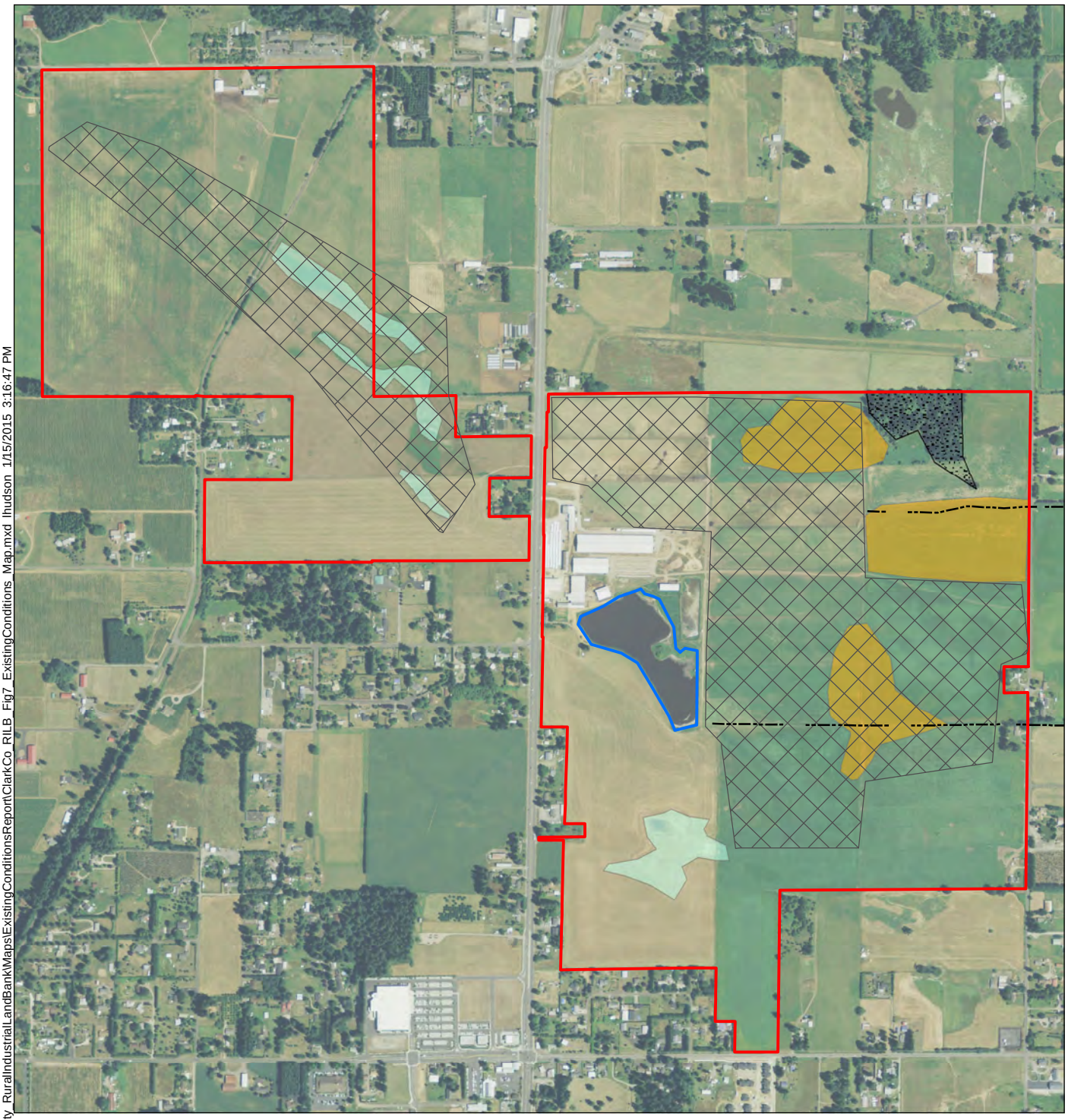
Figure 6
Treatment Lagoons Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank



Project Site Boundary
Drainage Ditch
Historic Pond/Wetland
Approximate Sub-Surface Drain Tile Field
Mature Forest/White Oak Grove
Potential Wetland with Muck Soils
Potential Wetland

NOTE:
1. Aerial imagery acquired from USDA NAIP (2013).

0 0.2 0.4 Miles

Q:\Jobs\141176-02.01_ClarkCounty_RuralIndustrialLandBank\Maps\ExistingConditionsReport\ClarkCo_RILB_Fig7_ExistingConditions_Map.mxd lhudson 1/15/2015 3:16:47 PM

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ANCHOR QEA

Figure 7
Existing Conditions Map
Site 1 Existing Conditions Report
Clark County Rural Industrial Lands Bank

APPENDIX A
USFWS IPAC SPECIES LIST

U.S. Fish and Wildlife Service

Trust Resources List

This resource list is to be used for planning purposes only — it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

Washington Fish and Wildlife Office
510 DESMOND DRIVE SE, SUITE 102
LACEY, WA 98503
(360) 753-9440
http://www.fws.gov/wafwo/

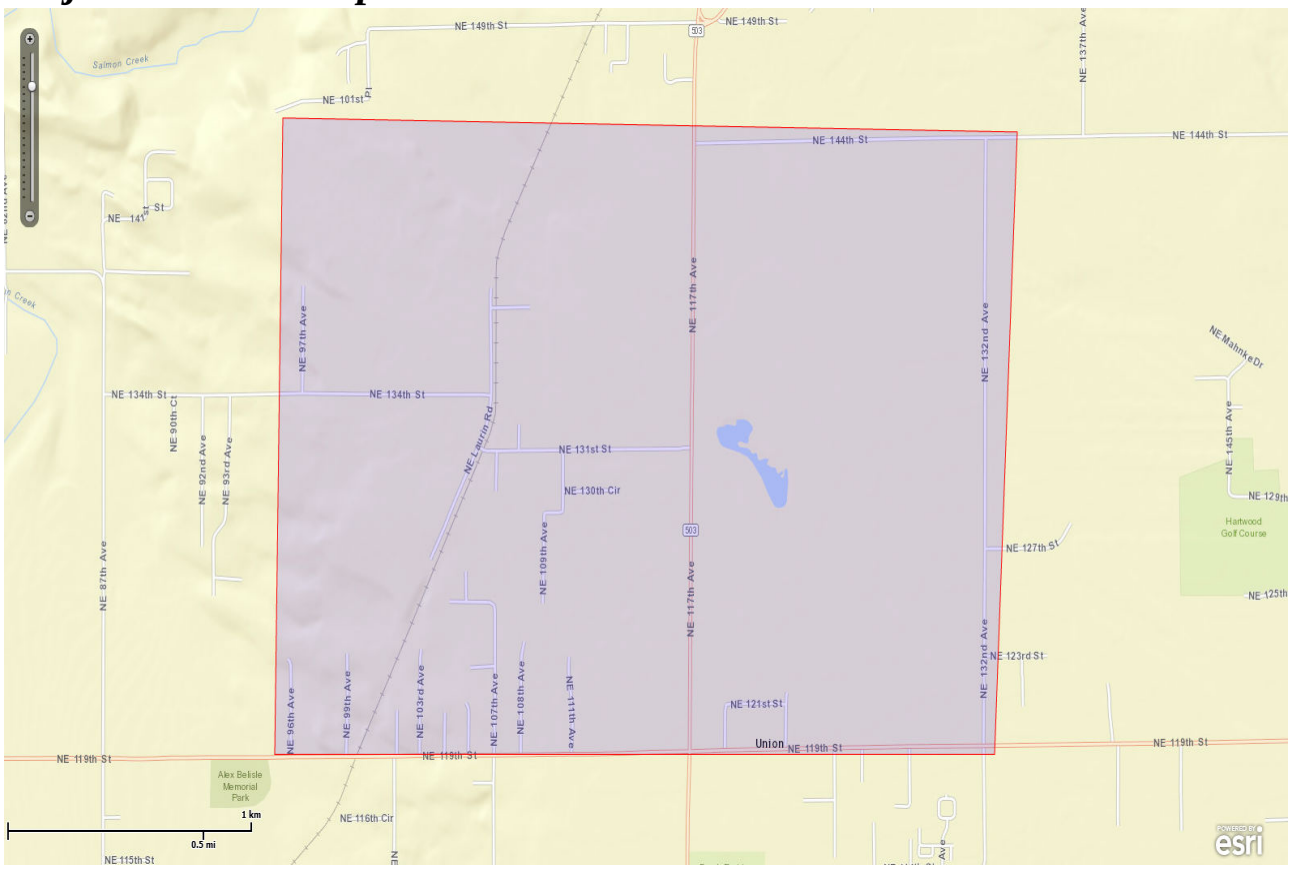
Project Name:

Clark County RILB

U.S. Fish and Wildlife Service

Trust Resources List

Project Location Map:



Project Counties:

Clark, WA

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83):

MULTIPOLYGON (((-122.5742135 45.7269152, -122.5353322 45.7264958, -122.5365338 45.7078555, -122.5746383 45.7078555, -122.5742135 45.7269152)))

Project Type:

Land - Clearing

U.S. Fish and Wildlife Service

Trust Resources List

Endangered Species Act Species List (USFWS Endangered Species Program).

There are a total of **9** threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section below for critical habitat that lies within your project area. Please contact the designated FWS office if you have questions.

Species that should be considered in an effects analysis for your project:

Amphibians	Status		Has Critical Habitat	Contact
Oregon Spotted frog (*Rana pretiosa*)	Threatened	species info	Proposed critical habitat	Washington Fish And Wildlife Office
Birds				
Streaked Horned lark (*Eremophila alpestris strigata*) Population:	Threatened	species info	Final designated critical habitat	Washington Fish And Wildlife Office
Yellow-Billed Cuckoo (*Coccyzus americanus*) Population: Western U.S. DPS	Threatened	species info	Proposed critical habitat	Washington Fish And Wildlife Office
Fishes				
Bull Trout (*Salvelinus confluentus*) Population: U.S.A., conterminous, lower 48 states	Threatened	species info	Final designated critical habitat	Washington Fish And Wildlife Office
Flowering Plants				
Bradshaw's desert-parsley (*Lomatium bradshawii*)	Endangered	species info		Washington Fish And Wildlife Office

Golden Paintbrush (*Castilleja levisecta*)	Threatened	species info		Washington Fish And Wildlife Office
Water howellia (*Howellia aquatilis*)	Threatened	species info		Washington Fish And Wildlife Office
Mammals				
Columbian White-Tailed deer (*Odocoileus virginianus leucurus*) Population: Columbia River DPS	Endangered	species info		Washington Fish And Wildlife Office
Gray wolf (*Canis lupus*) Population: U.S.A.: All of AL, AR, CA, CO, CT, DE, FL, GA, IA, IN, IL, KS, KY, LA, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NV, NY, OH, OK, PA, RI, SC, SD, TN, VA, VT, WI and WV; those portions of AZ, NM, and TX not included in an experimental population; and portions of OR, UT, and WA. Mexico.	Endangered	species info		Washington Fish And Wildlife Office

Critical habitats within your project area:

There are no critical habitats within your project area.

FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

There are no refuges found within the vicinity of your project.

FWS Migratory Birds (USFWS Migratory Bird Program).

The protection of birds is regulated by the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (BGEPA). Any activity, intentional or unintentional, resulting in take of migratory birds, including eagles, is prohibited unless otherwise permitted by the U.S. Fish and Wildlife Service (50 C.F.R. Sec.

10.12 and 16 U.S.C. Sec. 668(a)). The MBTA has no provision for allowing take of migratory birds that may be unintentionally killed or injured by otherwise lawful activities. For more information regarding these Acts see: http://www.fws.gov/migratorybirds/RegulationsandPolicies.html.

All project proponents are responsible for complying with the appropriate regulations protecting birds when planning and developing a project. To meet these conservation obligations, proponents should identify potential or existing project-related impacts to migratory birds and their habitat and develop and implement conservation measures that avoid, minimize, or compensate for these impacts. The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

For information about Birds of Conservation Concern, go to:
http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html.

To search and view summaries of year-round bird occurrence data within your project area, go to the Avian Knowledge Network Histogram Tool links in the Bird Conservation Tools section at: http://www.fws.gov/migratorybirds/CCMB2.htm.

For information about conservation measures that help avoid or minimize impacts to birds, please visit:
http://www.fws.gov/migratorybirds/CCMB2.htm.

Migratory birds of concern that may be affected by your project:
There are **11** birds on your Migratory birds of concern list. The underlying data layers used to generate the migratory bird list of concern will continue to be updated regularly as new and better information is obtained. User feedback is one method of identifying any needed improvements. Therefore, users are encouraged to submit comments about any questions regarding species ranges (e.g., a bird on the USFWS BCC list you know does not occur in the specified location appears on the list, or a BCC species that you know does occur there is not appearing on the list). Comments should be sent to the ECOS Help Desk.

Species Name	Bird of Conservation Concern (BCC)	Species Profile	Seasonal Occurrence in Project Area
Bald eagle (*Haliaeetus leucocephalus*)	Yes	species info	Year-round
Brewer's Sparrow (*Spizella breweri*)	Yes	species info	Breeding
Caspian Tern (*Hydroprogne caspia*)	Yes	species info	Breeding
Fox Sparrow (*Passerella liaca*)	Yes	species info	Breeding, Wintering

Olive-Sided flycatcher (*Contopus cooperi*)	Yes	species info	Breeding
Peregrine Falcon (*Falco peregrinus*)	Yes	species info	Breeding
Purple Finch (*Carpodacus purpureus*)	Yes	species info	Year-round
Rufous hummingbird (*selasphorus rufus*)	Yes	species info	Breeding
Short-eared Owl (*Asio flammeus*)	Yes	species info	Year-round
Vesper Sparrow (*pooecetes gramineus ssp. affinis*)	Yes	species info	Breeding
Willow Flycatcher (*Empidonax traillii*)	Yes	species info	Breeding

NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

Data Limitations, Exclusions and Precautions
The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work

conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery and/or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Exclusions - Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Precautions - Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

The following wetland types intersect your project area in one or more locations:

Wetland Types	NWI Classification Code	Total Acres
Freshwater Emergent Wetland	PEMCh	2.3011
Freshwater Emergent Wetland	PEMA	48.2861
Freshwater Emergent Wetland	PEM/ABH	16.2616
Freshwater Emergent Wetland	PEMC	25.9453
Freshwater Forested/Shrub Wetland	PSSC	3.9459
Freshwater Pond	PUBF	0.2996

APPENDIX B
USDA SOILS REPORT

United States Department of Agriculture

NRCS

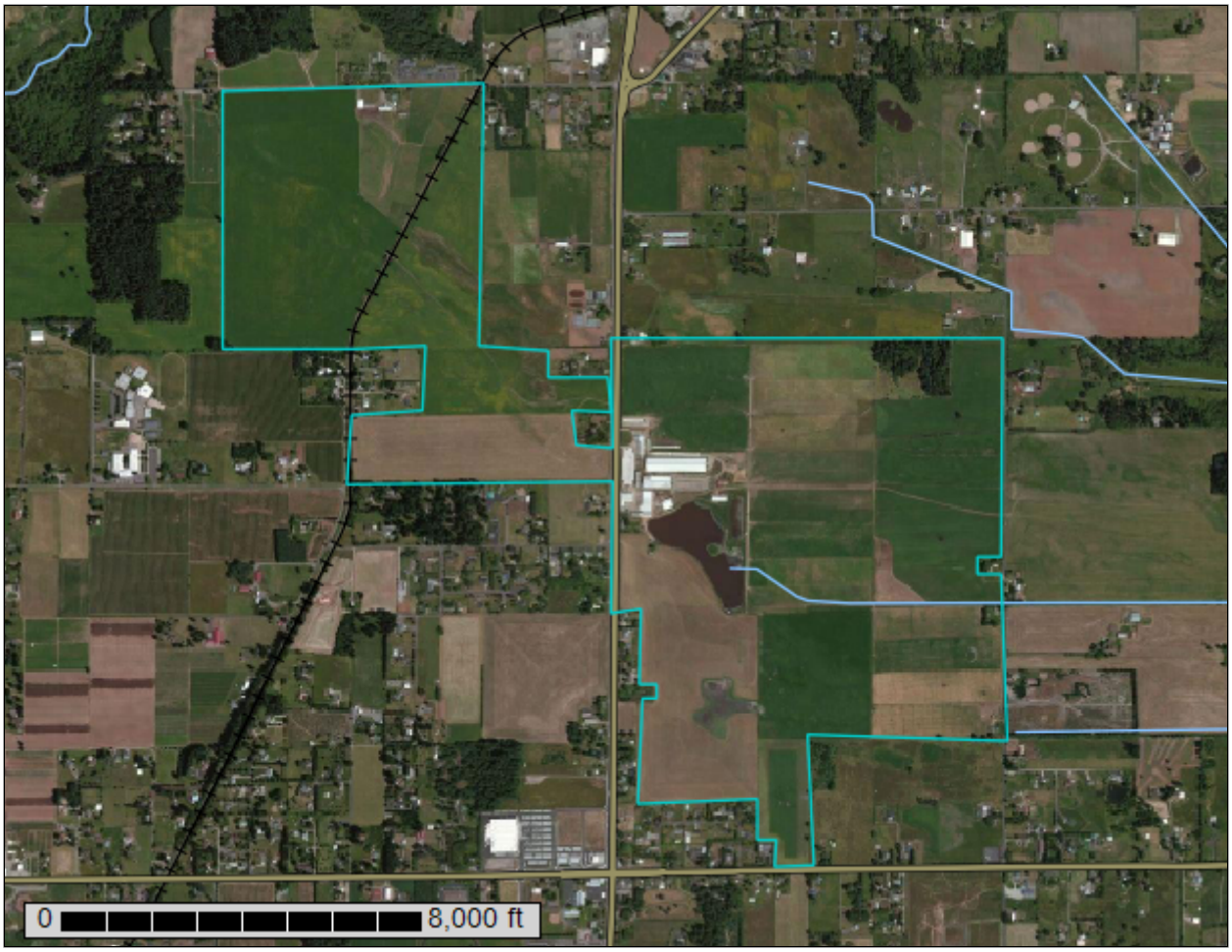
Natural Resources Conservation Service

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

Clark County, Washington

Rural Industrial Land Bank



October 4, 2014

Preface

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 (http://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).

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.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means

for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil scientists classified and named the soils in the survey area, they compared the

individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

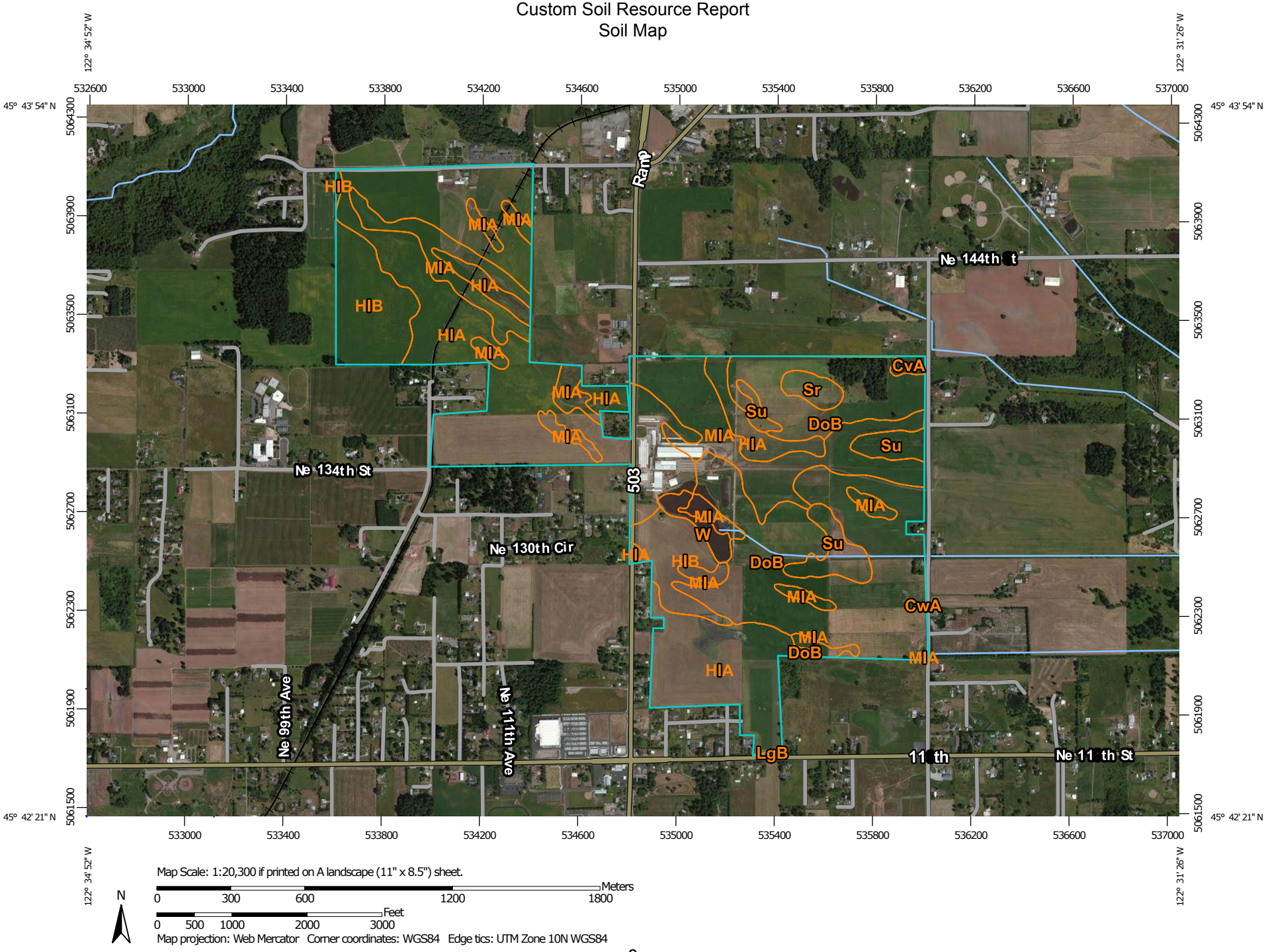
Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

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 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: http://websoilsurvey.nrcs.usda.gov
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: Clark County, Washington
Survey Area Data: Version 10, Dec 9, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 8, 2010—Sep 4, 2011

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

Clark County, Washington (WA011)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
CvA	Cove silty clay loam, 0 to 3 percent slopes	2.4	0.4%
CwA	Cove silty clay loam, thin solum, 0 to 3 percent slopes	0.2	0.0%
DoB	Dollar loam, 0 to 5 percent slopes	163.8	26.9%
HlA	Hillsboro silt loam, 0 to 3 percent slopes	242.4	39.8%
HlB	Hillsboro loam, 3 to 8 percent slopes	56.8	9.3%
LgB	Lauren gravelly loam, 0 to 8 percent slopes	0.3	0.0%
MlA	McBee silt loam, coarse variant, 0 to 3 percent slopes	108.0	17.7%
Sr	Semiahmoo muck	6.5	1.1%
Su	Semiahmoo muck, shallow variant	22.7	3.7%
W	Water	6.0	1.0%
Totals for Area of Interest		**609.1**	**100.0%**

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 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.

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.

Clark County, Washington

CvA—Cove silty clay loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2dwz
Elevation: 100 to 2,500 feet
Mean annual precipitation: 18 to 60 inches
Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 140 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Cove and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cove

Setting

Landform: Flood plains

Typical profile

H1 - 0 to 4 inches: silty clay loam
H2 - 4 to 36 inches: clay
H3 - 36 to 60 inches: gravelly silty clay loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: High (about 9.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: D
Other vegetative classification: Unnamed (G002XV102WA)

CwA—Cove silty clay loam, thin solum, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2dx0
Elevation: 100 to 2,500 feet
Mean annual precipitation: 18 to 60 inches
Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 140 to 210 days
Farmland classification: Not prime farmland

Map Unit Composition

Cove and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cove

Setting

Landform: Flood plains

Typical profile

H1 - 0 to 14 inches: silty clay loam
H2 - 14 to 21 inches: clay
H3 - 21 to 60 inches: silt loam

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: Occasional
Frequency of ponding: None
Available water storage in profile: High (about 11.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: D
Other vegetative classification: Unnamed (G002XV102WA)

DoB—Dollar loam, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2dx1
Mean annual precipitation: 50 inches
Mean annual air temperature: 50 degrees F
Farmland classification: All areas are prime farmland

Map Unit Composition

Dollar and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dollar

Setting

Landform: Terraces
Parent material: Alluvium

Typical profile

H1 - 0 to 6 inches: loam
H2 - 6 to 32 inches: loam
H2 - 32 to 60 inches: loam

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: 20 to 40 inches to fragipan
Natural drainage class: Moderately 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: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 5.4 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C
Other vegetative classification: Unnamed (G002XV202WA)

HIA—Hillsboro silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2dxh
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hillsboro and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hillsboro

Setting

Landform: Terraces
Parent material: Alluvium

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 36 inches: loam
H3 - 36 to 48 inches: sandy loam
H4 - 48 to 60 inches: sand

Properties and qualities

Slope: 0 to 3 percent
Depth to restrictive feature: 40 to 59 inches to strongly contrasting textural stratification
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None

Available water storage in profile: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 1
Hydrologic Soil Group: B
Other vegetative classification: Unnamed (G002XV502WA)

HIB—Hillsboro loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2dxj
Mean annual precipitation: 40 to 50 inches
Mean annual air temperature: 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Hillsboro and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hillsboro

Setting

Landform: Terraces
Parent material: Alluvium

Typical profile

H1 - 0 to 7 inches: loam
H2 - 7 to 36 inches: loam
H3 - 36 to 48 inches: sandy loam
H4 - 48 to 60 inches: sand

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 40 to 59 inches to strongly contrasting textural stratification
Natural drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 8.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Other vegetative classification: Unnamed (G002XV502WA)

LgB—Lauren gravelly loam, 0 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2dy8
Mean annual precipitation: 48 inches
Mean annual air temperature: 50 degrees F
Farmland classification: All areas are prime farmland

Map Unit Composition

Lauren and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lauren

Setting

Landform: Terraces
Parent material: Alluvium with volcanic ash

Typical profile

H1 - 0 to 6 inches: gravelly medial loam
H2 - 6 to 33 inches: very gravelly medial loam
H3 - 33 to 44 inches: very gravelly coarse sandy loam
H4 - 44 to 60 inches: very gravelly loamy coarse sand

Properties and qualities

Slope: 0 to 8 percent
Depth to restrictive feature: 40 to 59 inches to strongly contrasting textural stratification
Natural drainage class: Somewhat excessively drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Low (about 4.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Other vegetative classification: Unnamed (G002XV402WA)

MlA—McBee silt loam, coarse variant, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2dyj
Mean annual precipitation: 50 inches

Mean annual air temperature: 50 to 54 degrees F
Frost-free period: 165 to 210 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Mcbee variant and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Mcbee Variant

Setting
Landform: Depressions, drainageways
Parent material: Alluvium

Typical profile
H1 - 0 to 11 inches: silt loam
H2 - 11 to 19 inches: loam
H3 - 19 to 44 inches: gravelly fine sandy loam
H4 - 44 to 62 inches: very gravelly loamy sand

Properties and qualities
Slope: 0 to 3 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Moderate (about 6.7 inches)

Interpretive groups
Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: B/D
Other vegetative classification: Unnamed (G002XV102WA)

Sr—Semiahmoo muck

Map Unit Setting
National map unit symbol: 2dzt
Elevation: 10 to 1,300 feet
Mean annual precipitation: 35 to 70 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 125 to 250 days
Farmland classification: Prime farmland if drained

Map Unit Composition
Semiahmoo and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Semiahmoo

Setting

Landform: Depressions
Parent material: Herbaceous organic material

Typical profile

H1 - 0 to 13 inches: muck
H2 - 13 to 15 inches: fine sand
H3 - 15 to 60 inches: muck

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.57 to 1.98 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 18.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C
Other vegetative classification: Unnamed (G002XV102WA)

Su—Semiahmoo muck, shallow variant

Map Unit Setting

National map unit symbol: 2dzv
Elevation: 10 to 1,300 feet
Mean annual precipitation: 35 to 70 inches
Mean annual air temperature: 46 to 50 degrees F
Frost-free period: 125 to 250 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Semiahmoo variant and similar soils: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Semiahmoo Variant

Setting

Landform: Depressions
Parent material: Herbaceous organic material

Typical profile

H1 - 0 to 13 inches: muck
H2 - 13 to 30 inches: muck
H3 - 30 to 60 inches: very fine sandy loam

H4 - 60 to 65 inches: mucky peat

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Very poorly drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: About 0 inches
Frequency of flooding: None
Frequency of ponding: None
Available water storage in profile: Very high (about 12.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6w
Hydrologic Soil Group: C/D
Other vegetative classification: Unnamed (G002XV102WA)

W—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

Soil Information for All Uses

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.

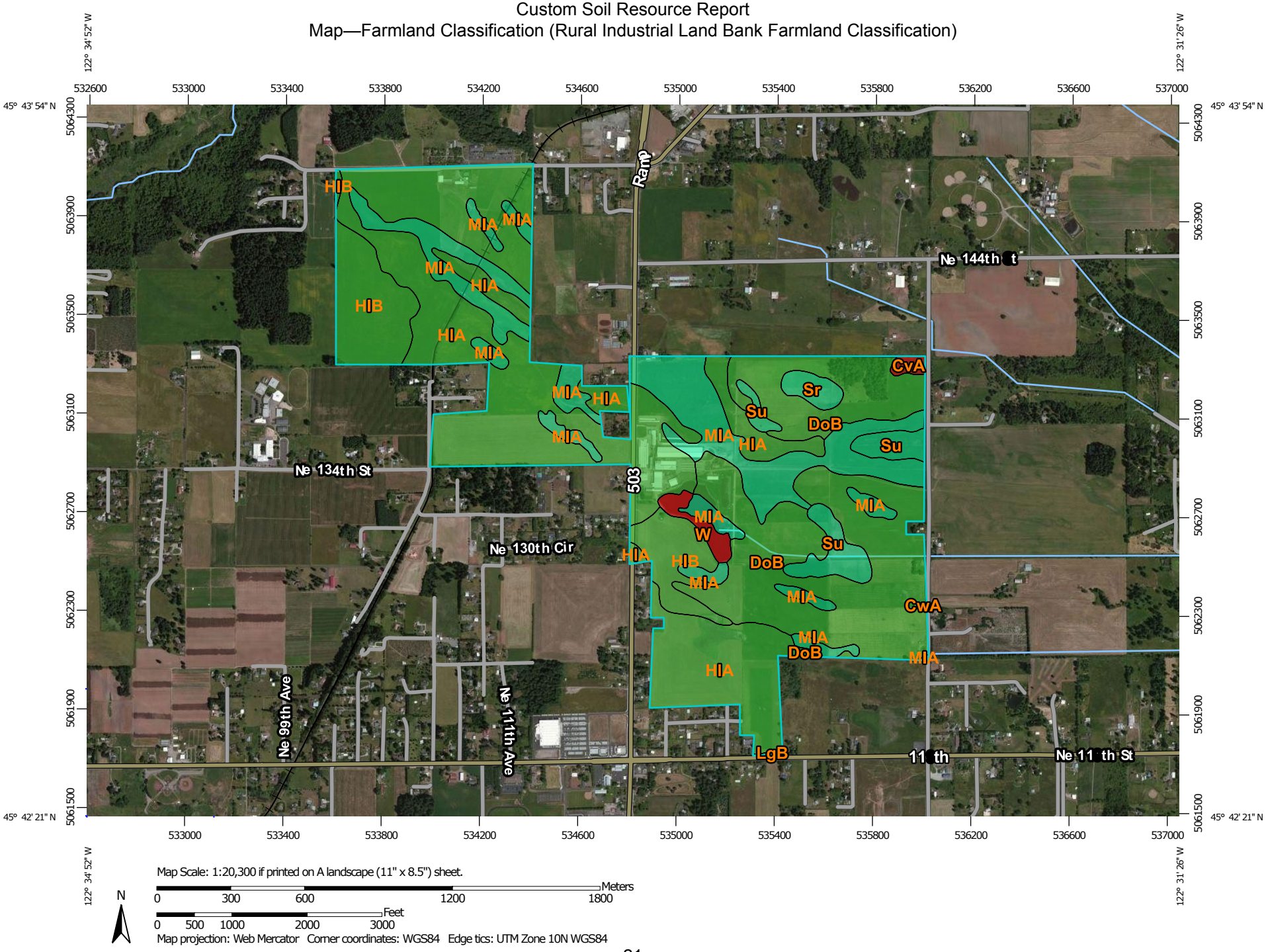
Land Classifications

Land Classifications are specified land use and management groupings that are assigned to soil areas because combinations of soil have similar behavior for specified practices. Most are based on soil properties and other factors that directly influence the specific use of the soil. Example classifications include ecological site classification, farmland classification, irrigated and nonirrigated land capability classification, and hydric rating.

Farmland Classification (Rural Industrial Land Bank Farmland Classification)

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Map—Farmland Classification (Rural Industrial Land Bank Farmland Classification)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

Soil Rating Polygons

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Soil Rating Lines

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Soil Rating Points

- Not prime farmland
- All areas are prime farmland
- Prime farmland if drained
- Prime farmland if protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated
- Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if irrigated and drained
- Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season
- Prime farmland if subsoiled, completely removing the root inhibiting soil layer
- Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60
- Prime farmland if irrigated and reclaimed of excess salts and sodium
- Farmland of statewide importance
- Farmland of local importance
- Farmland of unique importance
- Not rated or not available

Water Features

MAP INFORMATION

Streams and Canals

Transportation

Rails

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: http://websoilsurvey.nrcs.usda.gov
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: Clark County, Washington
Survey Area Data: Version 10, Dec 9, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 8, 2010—Sep 4, 2011

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.

Table—Farmland Classification (Rural Industrial Land Bank Farmland Classification)

Farmland Classification— Summary by Map Unit — Clark County, Washington (WA011)				
Map unit symbol	**Map unit name**	**Rating**	**Acres in AOI**	**Percent of AOI**
CvA	Cove silty clay loam, 0 to 3 percent slopes	Not prime farmland	2.4	0.4%
CwA	Cove silty clay loam, thin solum, 0 to 3 percent slopes	Not prime farmland	0.2	0.0%
DoB	Dollar loam, 0 to 5 percent slopes	All areas are prime farmland	163.8	26.9%
HlA	Hillsboro silt loam, 0 to 3 percent slopes	All areas are prime farmland	242.4	39.8%
HlB	Hillsboro loam, 3 to 8 percent slopes	All areas are prime farmland	56.8	9.3%
LgB	Lauren gravelly loam, 0 to 8 percent slopes	All areas are prime farmland	0.3	0.0%
MlA	McBee silt loam, coarse variant, 0 to 3 percent slopes	Prime farmland if drained	108.0	17.7%
Sr	Semiahmoo muck	Prime farmland if drained	6.5	1.1%
Su	Semiahmoo muck, shallow variant	Prime farmland if drained	22.7	3.7%
W	Water	Not prime farmland	6.0	1.0%
Totals for Area of Interest			**609.1**	**100.0%**

Rating Options—Farmland Classification (Rural Industrial Land Bank Farmland Classification)

Aggregation Method: No Aggregation Necessary

Aggregation is the process by which a set of component attribute values is reduced to a single value that represents the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be rendered. Aggregation must be done because, on any soil map, map units are delineated but components are not.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

The majority of soil attributes are associated with a component of a map unit, and such an attribute has to be aggregated to the map unit level before a thematic map can be rendered. Map units, however, also have their own attributes. An attribute of a map unit does not have to be aggregated in order to render a corresponding thematic map. Therefore, the "aggregation method" for any attribute of a map unit is referred to as "No Aggregation Necessary".

Tie-break Rule: Lower

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.

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421 SW Sixth Avenue, Suite 750
Portland, Oregon 97204
Phone 503.688.5057
www.anchorqea.com

MEMORANDUM

To:	Lisa Grueter, BERK Consulting	**Date:**	June 15, 2015
From:	Valerie Oster and Joe Pursley, Anchor QEA, LLC	**Project:**	141176-02.01
Cc:	Greg Summers, Anchor QEA, LLC		
Re:	Candidate Alternative Site Tour		

On June 3, 2015, Anchor QEA, LLC, scientists, along with Clark County (County) staff and consultants, participated in a site tour "windshield review" of candidate alternative sites to provide additional information in support of the Clark County Rural Industrial Land Bank environmental evaluation process. Currently, the County is considering the Docket Site (Site 1) and requested a comparison of this site to candidate Alternative Sites 2, 3, and 4 (candidate alternative sites), which were identified as meeting a stipulated set of criteria regarding land use, transportation accessibility, parcel size and configuration, and environmental constraints.

Anchor QEA scientists reviewed publicly available environmental information (aerial imagery, Washington Department of Fish and Wildlife Priority Habitat and Species lists, critical habitat area mapping, etc.) for the candidate alternative sites in advance of touring the sites via a County vehicle. The objectives of the site tour were to provide additional understanding of the ecological and geographical baseline conditions of mapped critical areas and identify unmapped potential site constraints at the candidate alternative sites. All visual evaluations were made from the vehicle or from the public rights-of-way. Detailed maps and information on each of the candidate alternative sites are available in other documents developed for the de-designation and inventory completed for Site 1.

This summary of the June 3, 2015, site tour provides commentary on the ecological conditions visible at each candidate alternative site and reflects the environmental constraints noted in maps and other available information. Example photographs taken of each site are provided at the end of this Memorandum. No physical property access was

available; therefore, the site tour was limited to stops at several reference sites identified along public roads and rights-of-way.

Site 2

The following list describes environmental conditions noted for Site 2 (Photographs 1 and 2).

- Site 2 is 412 acres and is located north of the Ridgefield Urban Growth Area (UGA) along Interstate-5 (I-5). Its topography is diverse and related to the presence of perennial streams and rolling hills.
- Land use appears to be consistent with descriptions within previously completed inventories.
- Based on views from public roads at the southern and eastern boundaries of the site, identified riparian habitat conservation areas and biodiversity areas located throughout the site likely are comprised of mature forest (age of more than 100 years), with a complex understory of sub-canopy, shrub, and herbaceous layers.
- Riparian areas that were visible from the public roads appear contiguous and would be expected to provide good or excellent quality habitat and contribute to the health of tributaries within the site that may support salmonids or other native fish and wildlife species.
- Interior oak and Oak Woodland conservation areas at the north of the site appear to be in good condition but may lack oak regeneration and propagation due to intensive agricultural land use.
- Wetlands are likely to be associated with jurisdictional tributaries and are therefore jurisdictional; buffer areas and jurisdictional waterways may expand under the new (2015) Washington State Department of Ecology (Ecology) rules and Clean Water Act (CWA) definitions of Waters of the United States.

Site 3

The following list describes environmental conditions noted for Site 3 (Photographs 3 and 4).

- Site 3 is 764 acres and lies between the Vancouver and Ridgefield UGAs on either side of I-5 at State Road 502 (NE 219th Street).
- Site topography is relatively flat.

- Numerous tributaries to Gee Creek exist throughout the site. Based on example locations viewed during the site tour, riparian habitat buffer areas appear to be in moderate to good condition. Gee Creek is a salmon-bearing stream (as shown on PHS maps).
- Potential unmapped seasonal tributaries were noted during the site tour west and east of I-5 but north of NE 219th Street.
- Stream buffers are currently limited in width (likely less than standards required by Ecology) due to impervious surface (I-5 interchange) adjacent to streams.
- Buffer areas for wetlands and jurisdictional waterways may expand under the new (2015) Ecology rules and CWA definitions of Waters of the United States.

Site 4

The following list describes environmental conditions noted for Site 4(Photographs 5 and 6).

- Site 4 is adjacent eastward of the Vancouver city limits. The site is 366 acres and lies east of the Vancouver UGA and NE 162nd Avenue.
- The site is topographically very flat; the water table is high and perched on Troutdale Formation basalt, which may contribute to the exceptionally wide mapped floodway and floodplain area and large riparian-associated wetlands mapped on the site (as shown on PHS and National Wetlands Inventory mapping).
- Two streams flowing to the south are potentially salmon-bearing streams with semi-intact riparian corridor habitat (as shown on PHS mapping).
- The central habitat conservation area was confirmed to be interior oaks and oak woodland as mapped (PHS maps). Due to cattle grazing and intensive agricultural practices oak regeneration and propagation may be limited on site.
- Buffers on streams and wetlands as well as floodway development restrictions and the presence of a Bonneville Power Administration utility corridor would likely significantly limit buildable acreage at the site.
- Buffer areas for wetlands and jurisdictional waterways may expand under the new (2015) Ecology rules and CWA definitions of Waters of the United States.

In summary, based on the site tour completed for the candidate alternative sites, the mapped environmental constraints at each of these sites appear to be more significant than those

mapped for Site 1, in particular due to topographical features, the presence of mapped fish bearing streams, and mapped floodways that are not present on Site 1. While each site contains mapped wetlands, the wetland features of the candidate alternative sites are more directly adjacent to mapped streams or other wetland features and exist within less disturbed or undeveloped habitat, whereas wetlands that may exist within Site 1 would all occur within agricultural lands. The available environmental information and visible site characteristics at the candidate alternative sites support the premise that development potential is more environmentally constrained at these sites than at Site 1.

Photograph 1

Site 2: Typical riparian corridor with a very mature mixed forest

Photograph 2

Site 2: Typical agricultural lands bordering existing streams and wetlands

Photograph 3

Site 3: Ponded stream water at Gee Creek and NE 209th Street

Photograph 4

Site 3: Looking north from NE 209th Street at Gee Creek and associated potential wetlands

Photograph 5

Site 4: Bonneville Power Administration power line corridor and dairy farm buildings east of NE 162nd Avenue

Photograph 6

Site 4: Oak woodlands and typical agricultural fields just east of NE 162nd Avenue

APPENDIX D: DOCKET APPLICATION CHECKLIST

Revised Introduction and New On-line Guidance
March 2012

SEPA ENVIRONMENTAL CHECKLIST

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:

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:

Please complete 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. ADDITION, complete the SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS (part D). For nonproject actions.

A. BACKGROUND

1. Name of proposed project, if applicable:

   Establishment of an RCW 36.70a.367 Industrial Land Bank

2. Name of applicant:

   Lagler Real Property LLC and Ackerland LLC

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

Lagler Real Property, LLC
14210 NE 117th Ave
Vancouver, WA 98662
360-254-8342

Ackerland, LLC
14210 NE 117th Ave
Vancouver, WA 98662
360-254-8342

Stephen W. Horenstein
Horenstein Law Group PLLC
500 Broadway, Suite 120
Vancouver, WA 98660
360-597-0965

4. Date checklist prepared:

February 9, 2014

5. Agency requesting checklist:

Clark County Community Planning, Vancouver, Washington

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

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

After the Comprehensive Plan is amended and two Industrial Land Bank areas identified and established, industrial development will take place in accordance with applicable development standards, environmental regulations, and a Master Plan reviewed and approved by the County. The State enabling law RCW 36.70a.367 requires the adoption of development regulations specific to Industrial Land Banks to guide the development of a statutory required Master Plan for Major Industrial Development in the designated areas. No development or specific industrial use is proposed, or being considered, at this time.

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

- Environmental Impact Statement for 2004 Clark County Comprehensive Plan.
- Environmental Impact Statement for 2007 Clark County Comprehensive Plan update.

- Type 2 Critical Aquifer recharge Area (CARA) site evaluations.
- Wetlands delineations as part of developing a Master Plan for major industrial development.
- Archeological predetermination as part of master planning for major industrial development for each of the properties.
- SEPA Checklist and Determination of Significance for required major industrial development Master Plan for each of the properties.

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.

- RCW 36.70a.367(2b) stipulates that the environmental review for this proposal, in addition to a threshold determination, must include:
  (a) An inventory of developable land as provided in RCW 36.70A.365; and
  (b) An analysis of the availability of alternative sites within urban growth areas and the long-term annexation feasibility of sites outside of urban growth areas.
- Final MDNS SEPA Determination with mitigation conditions.
- Comprehensive Plan Amendment designating up to two sites for an Industrial Land Bank.
- Adoption of an Industrial Land Bank Ordinance setting development standards and criteria for the required master planning process.
- Master Plan adoption, including SEPA review, prior to any application for development.
- Site Plan Review and SEPA determination prior to approval of a specific industrial development.

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.)

Proposed is the establishment of two Industrial Land Bank areas adjacent to and north of the Vancouver Urban Growth Area (VUGA) as an amendment to the Clark County Comprehensive Plan, in accordance with RCW 36.70a.367. The proposed Industrial Land Bank areas encompass two separate groups of parcels as described below.

- The Ackerland property west of 117th Avenue encompasses tax parcels 196656, 198375, 198335, 198324, 198113, 198111, and 198082 (-000). The property totals 223.72 acres.

- The Lagler property east of 117th Avenue encompasses tax parcels 198080, 198076, 198112, 198101, 198072, and 198075 (-000). The property totals 378.71 acres.

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.

Both properties are located in a rural area between the current Vancouver and Battle Ground urban growth boundaries, along NE 117th Avenue north of NE 119th St. and south of the rural center of Brush Prairie. The group of parcels owned by Ackerland, LLC is located west of 117th Avenue; the parcel group owned by Lagler Real Property, LLC is located east of 117th Ave. (see attached maps)

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site:
(circle one): Flat, rolling, hilly, steep slopes, mountainous,
other:

Both properties consist of generally flat, gently rolling terrain. Over decades of use for a dairy operation, most of the properties have been converted to pasture and hay fields which have been maintained and improved with selective leveling and drainage tile installation as needed. Clusters of barns, shops, storage sheds, and other buildings related to the dairy operation are located on the west edge of the Lagler property and the north edge of the Ackerland property. A small wood lot still exists in the northeast corner of the Lagler property.

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

Generally 8%, but up to 15% on the slopes of the leveled areas where farm structures are located.

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 prime farmland.

Ackerland property (estimates from NRSC soil survey website)

Code	*Soil Name*	*Slope %*	*Acres*	*Percent*	*Agriculture Classification*
HlA	Hillsboro silt loam	0 - 3	143.8	65.9	Non-Hydric, Class I prime
HlB	Hillsboro loam	3 - 8	37	17	Non-Hydric, Class II prime
MlA	McBee silt loam	0 - 3	37.4	17.1	Non-Hydric, Class III prime
		Totals	*218.2*	*100*	*Non-Hydric=100%*

Lagler property (data from NRSC soil survey website)

Code	*Soil Name*	*Slope %*	*Acres*	*Percent*	*Agriculture Classification*
CvA	Cove silty loam	0 - 3	2.5	0.7	Hydric, Class V

Code	*Soil Name*	*Slope %*	*Acres*	*Percent*	*Agriculture Classification*
CwA	Cove silty loam, thin solum	0-3	0.1	0.0	Hydric, Class IV
DoB	Dollar loam	0 - 5	163.2	42.9	Non-Hydric, Class III prime
HlA	Hillsboro silt loam	0 - 3	87.7	23.1	Non-Hydric, Class I prime
HlB	Hillsboro loam	3 - 8	21.7	5.7	Non-Hydric, Class II prime
LgB	Lauren gravelly loam	0 - 8	0.2	0.1	Non-Hydric, Class III prime
MlA	McBee silt loam	0 - 3	69.5	18.3	Hydric, Class III prime
Sr	Semiahmoo muck	--	6.5	1.7	Hydric, Class III
Su	Semiahmoo muck, shallow	--	22.8	6.0	Hydric, Class III
W	Water	--	6.0	1.6	Water
		Totals	*380.4*	*100.0*	*Non-Hydric=272.8 or 72%*

d. Are there surface indications or history of unstable soils in the immediate vicinity?

No, however both the Ackerland and Lagler properties are primarily designated NEHRP Class D with a Low to Very Low risk of liquefaction in the event of a major sustained earthquake.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate source of fill.

No grading or filling proposed as part of this proposal. Future industrial development would likely require some grading and filling, which would be reviewed, approved, performed and inspected in compliance with applicable state and county regulations. A separate environmental review would be conducted for any such proposed activity at the time of permit application and/or Site Plan Review.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Given the generally flat, gently rolling nature of both properties, erosion potential from water runoff is minimal. Erosion and dust potential from winds is a possibility during clearing, grading, and construction activities, but would be addressed and regulated by applicable state and County erosion control regulations at the that time.

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

Current County development code allows up to 100% site coverage for all industrial uses. However, additional setbacks and/or landscape requirements may apply, particularly abutting residential uses or zones, where a minimum 10ft L3 High Screen landscape buffer would generally be required (See Clark County Code Sections 40.230.085(E) and (F) and 40.320.010.)

The required Master Plan for the two land bank areas, and related new development regulations, could require additional landscape buffers abutting residential, rural, open space, and agricultural land zoning and/or uses. In addition, storm water drainage regulations will require any new development to dedicate a portion of its site to storm water management facilities, unless acceptable off-site facilities with capacity were available.

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

Compliance with County erosion control and development regulations, and any applicable Master Plan requirements or Site Plan Review conditions of approval.

2. AIR

a. What types of emissions to the air would result from the proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

The designation of the subject property as an Industrial Land Bank will not of itself create additional emissions into the air. Current emissions relate to existing normal agricultural activities, such as: dust, livestock odors, machinery operation, chemical sprays used to control insects and weeds, smoke from burning of debris and excess vegetation. Emissions from future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, and SEPA review of the specific development or development types proposed.

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

None known.

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

Future industrial development and activity on the subject site will be subject to all state, federal, and local laws and regulations related to air quality and emissions.

3. WATER

The designation of the subject properties as Industrial Land Bank will not involve diversion of, discharges to, or withdrawals from nearby or on-site water bodies. Current diversions, discharges and withdrawals relate to existing agricultural activities, such as: field drainage, irrigation, etc.

a. Surface Water:

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.

Ackerland property:
The eastern portion of the Ackerland property does contain shallow seasonal ponds and possible wetlands. No streams or rivers exist on or near the properties.

Lagler property:
An 11 acre pond exists on the western portion of the Lagler property, south of the barn complex. A 1.4 acre manure settling pond abuts the larger pond to the northeast.

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.

Probably, but unknown at this time. Such work may be part of future development proposals, which will be evaluated through the Master Plan process, Site Plan Review, and SEPA review of the specific development or development types proposed.

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.

None proposed at this time, but may be required for future industrial development subject to obtaining required permits.

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

Withdrawals or diversions related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, and SEPA review of the specific development or development types proposed.

5) Does the proposal lie within a 100-year floodplain?

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.

Discharges related to future industrial activities are unknown at this time, but will be addressed as part of any future development proposals through the Master Plan process, Site Plan Review, compliance with applicable regulations, and SEPA review of the specific development or development types proposed.

B. Ground Water:

Approximately 140 acres of the Ackerland property is mapped as a 5-10 year Public Wellhead Zone, which defines the sensitive areas around public well locations that contribute to the water quality of the well location. Such areas are subject to State and County regulation to protect the quality of public water supplies.

Both properties are in a Critical Aquifer Recharge (CARA) Category II Recharge area subject to County regulations to protect groundwater quality (CCC 40.410). Given the long list of activities that require a CARA permit, a formal site evaluation will likely be required during Site Plan Review for major industrial development of the properties.

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities if known.

The current agricultural use of both properties involves withdrawal of large quantities of ground water for pasture and field irrigation. Since no specific industrial development is proposed, or being considered, at this time, it is unknown whether future ground water withdrawals will be necessary. Public water lines operated by Clark PUD are available along NE 117th Avenue, . Upgrades are occurring in the area and may be necessary if a future industrial use requires large quantities of water.

Clark PUD has indicated a willingness to make any future upgrades to the water system to serve this development.

Discharges related to future industrial activities are unknown at this time, but will be addressed at the time of any future development through the Master Plan process, Site Plan Review, compliance with applicable regulations, and SEPA review of the specific developments or development types.

2) Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: 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.

The current Lagler Dairy Farm operation that encompasses both properties does produce large quantities of cow manure and waste water from barn cleaning activities. Manure from the barns is currently processed in a settling pond in the northwest portion of the Lagler property south of the barns, and the northern portion of the Ackerland property south of the barns. The two (2) homes on the northern edge of the Ackerland property are served by septic systems. The three (3) homes on the western, southern, and eastern edges of the Lagler property are also served by septic systems.

Discharges related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review,

Even though no specific industrial activity is proposed, or being considered, at this time, future full development of the properties will likely see all existing vegetation removed and replaced with standard landscaping, impervious surfaces, and buildings in accordance with the adopted Master Plan, applicable regulations, and Site Plan Review conditions of approval, after SEPA review of the specific development or development types proposed.

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

None known.

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

Details of landscaping related to future industrial development of the properties are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, and SEPA review of the specific development or development types proposed. All landscaping will be in accordance with applicable County development standards, the approved Master Plan, and any adopted conditions approval.

5. Animals

a. Indicate any birds and animals which have been observed on or near the site or are known to be on or near the site:

Types of Animals	Lagler	Ackerland	Notes and Comments
Birds (specify)	X	X	Duck, Geese, Hawk, Eagle (non-nesting), Songbirds
Mammals (specify)	X	X	Deer, Raccoon, coyote, gophers, mice, voles

b. List any threatened or endangered species known to be on or near the site.

None known.

c. Is the site part of a migration route? If so, explain.

No.

d. Proposed measures to preserve or enhance wildlife, if any:

None.

6. Energy and Natural Resources

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. lighting

compliance with applicable regulations, and SEPA review of specific developments or development types.

C. Water runoff (including storm water):

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.

Water runoff related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, compliance with County regulations (CCC 40.s850), and applicable state and federal regulations, and SEPA review of specific future developments or development types when proposed.

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

Waste materials related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, compliance with applicable regulations, and SEPA review of specific future developments or development types when proposed.

D. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

Water impacts related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, compliance with County storm water and erosion control requirements (40.385), and applicable state and federal regulations. Further analysis will occur at the time of SEPA review for the specific industrial development proposed for the Industrial Land Bank areas.

4. Plants

a. Check or circle types of vegetation found on the site:

Types of vegetation	Lagler	Ackerland
deciduous tree: alder, maple, aspen, other	X	X
evergreen tree: fir, cedar, pine, other	X	X
shrubs	X	X
grass	X	X
pasture	X	X
crop or grain	XX	XX
wet soil plants: cattail, buttercup, bull rush, skunk cabbage, etc	No	No
water plants: water lily, eel grass, milfoil, other	No	No

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

Energy and natural resource needs for future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, compliance with applicable regulations, and SEPA review of the specific development or development types proposed. Electrical and natural gas resources will likely be needed for operations, production, and heating. Clark PUD has indicated that substantial power capacity currently exists in the area and the agency will work with the property owner if upgrades become necessary to serve the development.

b. Would your project affect the potential use of solar energy by adjacent properties?

No.

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:

Potential energy conservation features related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review conditions of approval, and compliance with applicable regulations, after SEPA review of the specific development or development types proposed.

7. Environmental health

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

Environmental hazards related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review, compliance with applicable regulations, and SEPA review of specific future developments or development types when proposed.

1) Describe special emergency services that might be required.

None known at this time.

2) Proposed measures to reduce or control environmental health hazards.

None at this time.

b. Noise

Noise related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review conditions of approval, and compliance with applicable regulations, after SEPA review of the specific development or development types proposed.

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

None known at this time.

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.

Not known at this time.

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

None at this time.

8. LAND USE

a. What is the current use of the site and adjacent properties?

Both properties are part of the Lagler Dairy Farm – a dairy operation – formed as an LLC in 2002. Surrounding uses are agricultural or rural, as well as a cluster of large lot single family homes, an apartment complex, and a retail center anchored at WinCo just south of the Ackerland and Lagler properties, and along the southwest corner of the Lagler property (see attached aerial photo and map).

Neighboring properties to the north of the Ackerland property are designated Rural-5, to the northwest, Rural-10, to the west, Agriculture and Parks/Open Space, to the south zoned commercial and industrial with a Railroad Industrial Reserve overlay and some Urban Low Density residential and Light Manufacturing, and to the east and northeast a mixture of Agriculture, Rural-5, and Rural Industrial. Summit View High School, an alternative school of the Battle Ground School District, is located across 149th Street north of the Ackerland property.

The largest Lagler parcel east of NE 117th Ave. abuts the southeast corner of the Ackerland property and is designated Agriculture with an Industrial Reserve overlay (see attached map). Lands to the north and northwest of the Lagler property are mostly designated Agriculture with a large node of Rural-5 along the east side of 117th Avenue. Lands to the west are split between Agriculture, Light Industrial, and Community Commercial along the east side of 117th Avenue. At the southwest corner of the Lagler property a small area is designated Urban Low Density Residential with a large area of High Density Residential the south (across NE 119th St). Battle Ground School District's Prairie High School is located a short distance from the Lagler property, south of 119th St and west of 117th Avenue, within the VUGA. A small area to the southeast of the Lagler property is designated Light Industrial, beyond which is an area of Rural-5 north of 119th St. and Urban Low Density Residential south of 119tht St.

A 120 acre area of the VUGA extends north along the west side of 117th Ave. from 119th St. north - ending at the Lagler Dairy barn complex. The southern 1/3 of the peninsula is zoned C-3 for community commercial uses and contains a grocery store and a bank, with about 1/2 the area not yet developed for commercial uses. The middle 1/3 is designated for industrial, and the northern 1/3 has the east half designated as industrial and the west half designated for low density residential (see attached map). This portion of the VUGA also encompasses the residential properties along the east side of 117th Avenue, most of which are designated for light industrial or commercial use. The designated low density residential properties at the southwest corner of the Lagler property, north of 119th Street, and the designated light industrial properties at the northwest corner of 119th Street and 132nd Avenue, are also in the VUGA.

A private airfield, with grass runway, for several small private planes, exists just to the north of the largest Lagler parcel and, though designated Agricultural, is zoned to continue as an airport. Lagler Dairy LLC also owns 105 acres east of 132nd Avenue that are not part of the proposed Industrial Land Bank area.

b. Has the site been used for agriculture? If so, describe.

Both the Ackerland and Lagler properties are currently in agricultural use and have been for over 60 years. The current agricultural activity on both properties is related to operation of the existing dairy – barns, corrals, pasture, hay and feed production, irrigation, and dairy waste processing.

c. Describe any structures on the site.

Data from County Assessor records. See attached aerial photo.

Ackerland property

Building	Year Built	Description
House	1942/1950	2 BR/ 1 Bath/ 1,092 sf w carport
Mobile Home	1994 Skyline	2,368 sf (including additions)
Machine Shed	1950	2,560 sf w 704 sf Lean-to
Loft Barn	1950, 1960	5,525 sf; 4,400 sf w 280 sf shed
Loafing Shed	1950	4,600 sf
Detached Garage	2000	624 sf

Lagler property

Buildings	Year Built	Description
House (117th Ave)	1901/1950	5 BR/ 2 Bath/ 2,830 sf w carport; basement unfinished
House (132nd Ave)	1942	2 BR/ 1 Bath/ 1,464 sf w 2 garages (1 attached)
House (132nd Ave)	1950	3 BR/ 2 Bath/ 2,442 sf w attached garage
5 Barns (Metal)	1940(4), 1981(1)	6,800 sf; 8,000 sf; 6,000 sf; 9,000 sf; 6,900 sf;

3 Loafing Sheds	1940(2), 1980(1)	31,920 sf; 28,160 sf; 80,400 sf;
General Purpose	1940	800 sf
2 Machine Sheds	1940	3,960 sf; 6,210 sf
Office	1960	2,400 SF

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

All existing structures would eventually be demolished, but not until industrial redevelopment of the site is approved. At that time industrial buildings appropriate for the ML Zone in conformance with County development regulations, adopted Master Plans, and Site Plan Review conditions of approval, will be constructed.

e. What is the current zoning classification of the site? (see attached map)

Ackerland parcels: Agriculture AG-20

Lagler parcels: Agriculture AG-20, with Zoning Overlay: Industrial Urban Reserve 20

f. What is the current comprehensive plan designation of the site? (see attached map)

Ackerland parcels: Agriculture, however 3 parcels in the southern portion of the property have a Railroad Industrial Reserve Overlay.

Lagler parcels: Agriculture, with an Industrial Reserve Overlay.

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

Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The northeast portion of the Lagler property does contain five areas mapped as peat deposits, totaling approximately 28 acres. Hydric soils stretch across the central areas of both properties, primarily MIA soils, but with two large areas of Su soils on the eastern portion of the Lagler property (see list of soils under Item 1 above and attached map).

I. Approximately how many people would reside or work in the completed project?

Since no specific industrial development is being proposed or considered at this time, it is unknown how many people will be employed on the properties. However, employment goals in the Comprehensive Plan suggest an average of 9 jobs per industrial acre. Assuming major industrial development at some time during the 20-year horizon of the Comprehensive Plan, this could mean a minimum of 2,000+ jobs on the Ackerland property

and 3,400+ jobs on the Lagler property. Many light industrial properties in Clark County create more jobs per acre than these minimums.

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

Residents of the five (5) existing homes on the properties (Ackerland 2, Lagler 3), would be displaced but not until future redevelopment of the site actually occurs.

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

None.

l. Proposed measures to ensure proposal is compatible with existing and projected land uses/plans:

Conformance with County development codes and landscaping/buffer standards, adoption and application of new development regulations governing the master planning process for major industrial developments, and Site Plan Review conditions of approval. RCW 36.70a.367(3) requires that the development regulations for the major industrial development master planning process must be adopted in concert with the approval of the Industrial Land Bank areas.

The required regulations must ensure that the Master Plan include or addresses the following:

(a) That urban growth will not occur in adjacent non-urban areas;
(b) That development is consistent with the County's regulations for protection of critical areas;
(c) That required infrastructure is identified and provided concurrent with development phases;
(d) That transit-oriented site planning and demand management programs are addressed;
(e) That provision is made for addressing environmental protection, including air and water quality;
(f) That interlocal agreements with service providers be in place at Master Plan approval;
(g) That industrial land bank area is primarily for major industrial and manufacturing businesses, and that commercial and service buildings/facilities within the industrial development cannot exceed 10% of the total gross floor area of buildings/facilities in the development. These commercial and service uses may not be promoted to attract clientele from the surrounding area and must be established concurrent with or after the industrial or manufacturing businesses;
(h) That any new infrastructure is provided for and/or applicable impact fees are paid to assure that adequate facilities are provided concurrently with the development phases;
(i) That buffers are provided between the major industrial development and adjacent rural areas; and
(j) Provisions to mitigate adverse impacts on designated agricultural and resource lands.

The County's Master Planned Development code (CCC 520.070) was amended December 14, 2012 to include provisions for master planning of light industrial areas. The detailed requirements of RCW

36.70a.367, summarized above, are not specifically addressed. However, the minimum standards and criteria in the County code do not conflict with the RCW standards and do provide a good framework for addressing the state requirements as part of the conditions of approval for the Comprehensive Plan amendment and rezone.

Section F of the Master Plan Development code does allow for new development standards to be considered as part of the master planning process. The applicant proposes to work with County staff to develop standards that satisfy both state and local requirements for inclusion in the Master Plan and a Concomitant Rezone Agreement or Developer Agreement.

9. Housing

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.

Two (2) single family homes currently exist on the north edge of the Ackerland properties, one being a 1994 mobile home, and three (3) single family homes currently exist on the Lagler properties, one facing 117th Ave. and two facing 132nd Ave. All would likely be eliminated at full development of the properties for industrial use.

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

None.

10. Aesthetics

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

No structures or specific development is proposed at this time. The current Clark County Development Code does allow structures in the light and heavy industrial zones to be up to 100 ft in height, excluding unique architectural features such as towers, cupolas and peaked roofs (No height limitation for accessory towers). However, for buildings exceeding thirty-six (36) feet in height, the building setback shall be equal to the height of the building, up to a maximum setback of fifty (50) feet. Establishment of the two Industrial Land Bank areas, as proposed, also requires the adoption of new development regulations to guide the master planning process for future major industrial development of the properties.

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

Rural views of travelers along NE 117th Avenue, rural views from surrounding residential properties, and views from the Clark County park property abutting the west side of the Ackerland property would likely be altered or obstructed. Landscape buffers are required by current County development codes and would be enhanced as part of the master planning process prior to future industrial development of the properties.

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

At the time of development, landscaping and buffers in conformance with adopted Clark County development codes and standards, the adopted Master Plans, and Site Plan Review conditions of approval, would be required.

11. Light and glare

Light and glare related to future industrial activities are unknown at this time, but will be addressed as part of future development proposals through the Master Plan process, Site Plan Review conditions of approval, and compliance with applicable regulations, after SEPA review of the specific development or development types proposed.

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

Even though no specific development is proposed at this time, it is likely that normal security and outdoor activity area lighting will be provided as part of any industrial development. Applicable County codes already require that lighting be directed away from uses on adjacent parcels and shielded to minimize nighttime glare. These requirements also apply to glare from glass or shiny exterior surfaces of buildings.

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

Unlikely, if development is designed and operated in conformance with applicable County codes.

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

None known.

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

Compliance with the design requirements of the adopted Master Plan, any Site Plan Review conditions of approval, and the requirements of County code.

12. Recreation

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

Undeveloped County parks property abuts the western edge of the Ackerland property. The land north of the Ackerland property, across 149th Street, is owned by the Battle Ground School District which operates an alternative high school on a portion of that property. The majority of that school district property is not yet developed, but remains in forested and open space condition.

A privately owned baseball field complex exists a short distance northeast of the Lagler property.

b. Would the proposed project displace any existing recreational uses?

No.

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

Based on current County codes, future development of the Ackerland property would likely be required to provide a landscape screening buffer along that portion of the site abutting the Clark County parks property. Details of such a landscape buffer can be included in the required Industrial Land Bank Master Plan and as conditions of approval during Site Plan Review for any future industrial development on the western portion of the Ackerland property.

13. Historic and cultural preservation

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

Yes. One property along 119th Street abutting the Lagler property to the south and two non-abutting properties in the rural neighborhood to the southwest are listed in the Clark County Historic Resource Inventory.

Note: We will identify these sites on exhibits to the submitted application.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

None other than noted above. The general area is rated medium-high for archeological significance. An archaeological predetermination will be conducted as part of the master planning process.

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

Based on current County codes, future development of the Lagler property would be required to provide a landscape buffer along that portion of the site abutting the historic property to the south.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

117th Avenue is the major arterial connecting between the City of Vancouver and the City of Battle Ground and is accessible from both the Ackerland and the Lagler properties. Access to I-205 is 5 miles to the south and west, connecting by way of the Padden Parkway or SR-500. Access to I-5 is about 4 miles to the north through Battle Ground and 6 miles to the west by way of main St. which becomes NE 219th St. (See attached map).

- The Ackerland property is bordered by the major arterial of NE 117th Avenue to the east and County road 149th Street to the north. The largest parcel of the property is traversed by a railroad right-of-way currently owned by Clark County.

  The County Arterial Atlas shows a proposed road connecting through the largest parcel of the Ackerland property from 92nd Ave. at 134th St. northeasterly to 117th Avenue at 144th St.

- The Lagler property is bordered by the major arterial of NE 117th Avenue to the west, County road 119th Street to the south, and County road NE 132nd Avenue to the east. 119th Street is being improved to Arterial status in phases.

  The County Arterial Atlas shows a proposed south-to-north extension of 124th Avenue through the middle of the Lagler property from 119th Street to 144th Street. In addition, the Atlas shows a west-to-east extension of 134th Street across the northern edge of the Lagler properties, thus connecting 117th Avenue with 132nd Avenue.

Primary access for future industrial development will be from NE 117th Ave. for both properties, but proposed roads indicated in the Arterial Atlas suggest alternatives may be available in conjunction with future development. However, given the RCW 36.70a.367(3) stipulation that designation of an Industrial Land Bank area not cause or encourage urban growth to occur on neighboring non-urban properties, such options may be limited or constricted. Access for future major industrial development on either the Ackerland or Lagler property is from NE 117th Avenue (SR-503). Access will be addressed more specifically as part of the required Master Plan process and Site Plan Review. Additional SEPA review of the Master Plan and future development or development types proposed will be required at that time.

Mitigation of impacts on the continued use and viability of neighboring rural and agricultural lands, and the RCW 36.70a.367(3) stipulations, may require that proposed road corridors indicated in the Arterial Atlas not be improved all the way through any new major industrial development on the subject properties, and that frontage improvements be limited to 117th Avenue.

b. Is site currently served by public transit? What is approximate distance to the nearest transit stop?

Transit does pass both the Lagler and Ackerland properties on NE 117th Avenue, connecting between Vancouver and Battle Ground. The nearest service stops are at 119th Street near Prairie

High School and 149th Street in Brush Prairie. Today, the approximate distance from property road frontage to the nearest transit stop, for the Ackerland or Lagler property, is about 1/4 to 1/2 mile.

c. How many parking spaces would the completed project provide or eliminate?

No existing approved parking spaces would be eliminated. Even though no specific industrial activity is proposed, or being considered, at this time, parking for future full development of the properties will be provided in accordance with the adopted Master Plan, applicable regulations, and Site Plan Review conditions of approval.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Even though no specific industrial activity is proposed, or being considered, at this time, the need for new roads or streets, or improvements to existing roads or streets, is very likely, and anticipated by the proposed new roads indicated in the County Arterial Atlas. Roads, streets, and improvements necessitated by future development will be provided in accordance with the adopted Master Plan, applicable regulations, and Site Plan Review conditions of approval, as discussed above.

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

The larger northern parcel within the Ackerland properties is traversed by a County owned railroad right-of-way. Since no specific industrial activity is proposed, or being considered, at this time, the potential use of the railroad right-of by an industrial activity is unknown. The Ackerland property is ready to develop with industrial uses that will access the railroad.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Not calculated at this time.

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

None at this time. However, such measures can be considered during the required master planning, additional SEPA review, and Site Plan Review processes prior to any future major industrial development of the properties.

15. Public services

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

Additional fire, police and emergency medical services will likely be required once the properties are fully developed for industrial use.

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

None.

16. Utilities

a. List utilities currently available at the sites:

Electricity and water are available to both properties from Clark Public Utilities. NW Natural gas has a pipeline in 117th Avenue which is utilized by the current dairy operation. Telephone and refuse services are generally available in the area. Sanitary sewer service is not yet available to the area, but preliminary plans have been prepared for the Lagler and Ackerland properties to provide sewer service directly to this site in cooperation with Clark Regional Wastewater District to assure that service and capacity is available when needed (see attached map).

Note: we will attach this sewer plan to the submitted application.

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.

Since no development or specific industrial use is proposed or being considered at this time, specific utility needs are unknown. Utility extensions and capacity expansions will be review as part of the master planning and Site Plan Review processes prior to future industrial development.

C. SIGNATURE

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.

Signature: _____

Name of signee DENNIS LAGLER

Position and Agency/Organization manager LAGLERS DAIRY LLC

Date Submitted: Feb 12, 2014

D. SUPPLEMENTAL SHEET FOR NON-PROJECT ACTIONS

(**IT IS NOT NECESSARY** to use this sheet for project actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment in .

When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water; emissions to air; production, storage, or release of toxic or hazardous substances; or production of noise?

Once the properties have been designated as Industrial Land Bank Areas it is likely that future industrial development will increase, to some extent, storm water runoff, air emissions from vehicles and industrial processes, noise, and the risk of toxic or hazardous substances being released.

Proposed measures to avoid or reduce such increases are:

Compliance with all applicable state, county, and federal regulations pertaining to storm water, air emissions, noise, and toxic or hazardous substances. These issues can be addressed in the required Industrial Land Bank Master Plan and related development regulations, the SEPA environmental review process, and Site Plan Review performed prior to any development approvals.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

No endangered plant or animal species are known to exist on either of these properties. No streams or creeks exist on or about the properties.

- A large area of riparian habitat does exist to the north and northwest of the Ackerland properties, along Salmon Creek and its tributary streams.
- The edge of a WDFW Priority Habitat Species buffer touches the northeast corner of the Lagler property. The edge of a Priority Habitat and Species riparian area touches the southeast corner of the Lagler property.

Once the Ackerland and Lagler properties are designated as Industrial Land Bank areas, future industrial development will cause most existing vegetation to be removed and replaced with impervious surfaces and landscaping in accordance with applicable development codes and environmental regulations. Any animals not adapted to urban or industrial activities could be displaced.

Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Compliance with all applicable state, county, and federal regulations pertaining to the protection or conservation of plants, animals, fish, or marine life. Additional measures can be considered as part of the required master planning and Site Plan Review processes for future major industrial development on the properties. Additional SEPA review will be required at that time. The Washington Department of Fish & Wildlife Priority Habitat and Species buffer and the riparian habitat areas will be protected.

3. How would the proposal be likely to deplete energy or natural resources?

The designation of the properties as Industrial Land Bank areas would not in itself deplete energy or natural resources. Future industrial development will require the use of a variety of building materials, the use of energy in construction, and the use of energy and some measure of natural resources in any future major industrial operations on the sites.

Proposed measures to protect or conserve energy and natural resources are:

Compliance with all applicable state, county, and federal regulations pertaining to the use and conservation of energy and natural resources. Additional measures can be considered as part of the review and approval process for future industrial development on the properties.

4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Existing County development codes already address potential impacts on sensitive areas, wetlands, historic resources, potential archaeological sites, and species habitat. A wetland inventory, archeological predetermination, and a CARA site evaluation will likely be required as part of the required master planning process for major industrial development of the Industrial Land Bank areas.

While there are no existing development codes addressing impacts on agricultural lands, the legislation that authorizes the designation of two Industrial Land Bank areas outside of any Urban Growth Area also requires that surrounding rural and agricultural lands be protected from urban development.

Proposed measures to protect such resources or to avoid or reduce impacts are:

Conformance with County development codes, environmental regulations, and landscaping/buffer standards, adoption and application of new development regulations to govern the major industrial Master Plan process, further SEPA review at the time of Master Plan and Site Plan Review. RCW 36.70a.367(3) requires that the County adopt additional development regulations for the Master Plan process in concert with the designation of Industrial Land Bank areas.

The required regulations must ensure that the Master Plan for major industrial development of the Industrial Land Bank areas include or address the criteria listed above at the end of the Land Use section of the SEPA checklist Such regulations have not yet been adopted by Clark County, but must be developed and considered in concert with review of the proposed Industrial Land Bank areas.

Mitigation of impacts on the continued use and viability of neighboring rural and agricultural lands, and the RCW 36.70a.367(3) stipulation that urban growth not occur on neighboring non-urban properties, may require enhanced setbacks and landscape buffers, that some peripheral roads not be improved to urban standards, and that new roads not be constructed all the way through the properties.

Given that the areas were officially designated by the County as Agriculture in 2004, the County must make new findings, in keeping with the decisions of the Western Washington Growth Management Board and the courts regarding the 2007 Comprehensive Plan amendments, which the Ackerland and Lagler properties qualify for conversion for rural industrial use. See discussion regarding de-designation of agricultural lands in the Narrative to the Application.

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

Does not apply.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Does not apply.

6. How would the proposal likely increase demands on transportation or public services and utilities?

Future major industrial development on the subject properties would likely increase traffic significantly on NE 117th and other local streets and highways. Additional public services and utility enhancements will likely be required.

Proposed measures to reduce or respond to such demand(s) are:

Necessary improvements will be addressed in the required Industrial Land Bank Master Plan, based on regulations adopted with this amendment, and during Site Plan Review for any proposed major industrial development. Additional SEPA review will also be required at that time.

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

The designation of the properties as Industrial Land Bank for future industrial development does not, in itself, conflict with any local, state, or federal laws or requirements for the protection of the environment.

There have been concerns raised during a previous county-wide review of the Comprehensive Plan, and the available inventory of industrial and agricultural lands, that the de-designation of these properties as Agriculture AG-20 in favor of an Industrial designation would negatively impact the preservation of other agricultural lands and operations in the area. However, the previous consideration involved extending the VUGA to encompass the subject properties. That action was found by both the Western Washington Growth Management Board and the Superior Court to be deficient. The subject properties have since been removed from the VUGA by County action and their previous Agriculture AG-20 designation reapplied. The Lagler property on the east side of 117th Ave. does retain its 2004 Urban Reserve overlay designation and 3 parcels at the southern end of the Ackerland property also retain their Railroad Industrial Reserve overlay designation. The major portion of the Ackerland property is not covered by any urban overlay designation.

However, RCW 36.70a.067 does allow the designation of up to two large Industrial Land Bank areas outside of any urban growth area in order to accommodate large industrial enterprises that cannot be accommodated within any local urban growth area because of the lack of sizable properties. Several approval criteria related to necessity, environmental impact, natural resource lands, and master planning as summarized above at the end of the Land Use section of the SEPA checklist, do apply.

4838-3683-7655, v. 3

APPENDIX E: UTILITIES ANALYSIS, DOCKET SITE

MacKay Sposito

ENERGY PUBLIC WORKS LAND DEVELOPMENT

FEDERAL WAY OFFICE

33400 8th Avenue South, Suite 130 • Federal Way, WA 98003
253.205.8700 • info@mackaysposito.com

MEMORANDUM

TO: Lisa Grueter, AICP, Berk Consulting

FROM: Paul Harmsen, P.E.

RE: 15867-Clark County Rural Industrial Lands Bank —Utility and Stormwater Analysis

DATE: May 26, 2015

Stormwater

Provider: Land owner:

*Current Infrastructure***:** As identified in the Anchor QEA report on site critical areas existing conditions, opportunities and constraints report there are 7 potential wetlands that have been identified on the two properties. Additionally there is one large existing settling pond on the Lagler property and on both properties there are large areas with subsurface drainage tiles. Large areas of muck soil (USDA Natural Resources Conservation Service) are present on the property. Wetland and habitat protection will be required for any proposed improvements and management of the water quality and stormwater contributions must be taken into consideration (per CCC Chapters 13.26A and 40.385). Based on these requirements all contaminants to surface water, stormwater and groundwater will be treated prior to discharge to ensure protection of surface and groundwater quality for drinking water supply, recreation, fishing and other beneficial uses.

Improvements:

Based on our assessment a regional stormwater system is recommended. This will allow for development to maximize the available land, preserve wetlands, maintain existing drainage basins and create habitat corridors. To accomplish this, the stormwater solution should be developed adjacent to and integrated within the existing wetland buffers on the property. This will reduce impacts of the stormwater ponds and minimize impacts to the existing wetlands. Our rational is that the space between the wetlands will be difficult to use for development due to their proximity and associated buffers. As such, the land around the wetlands has been identified for stormwater treatment and detention facilities. Using the Western Washington Continuous Simulation stormwater model for preliminary analysis, and an estimated developed site impervious area, a total water quality treatment and detention pond surface area was determined. The total area is approximately 20% of the net developable land identified. The Land Use Analysis figure shows the anticipated areas for the stormwater facilities.

Sewer
Provider: Clark Regional Wastewater District
Current Infrastructure: Gravity sewer main is present in NE 124TH Avenue about 1000 feet south of the property (i.e. south of NE 119th Avenue, at the intersection of NE 124TH Avenue and NE 114th Street).
Improvements/Extensions: Sewer service to this project would be provided through the construction of two sanitary lift stations. On-site sanitary sewer would gravity drain to one of the two lift stations. The northern lift station would pump to the southern pump lift station; the southern lift station would pump to the existing off-site sanitary sewer system in NE 124th Avenue.

Electrical
Provider: Clark Public Utilities
Current Infrastructure: Electrical infrastructure in NE 119th Avenue and along Highway 503 (NE 117th Ave). Clark Public Utilities has an existing substation located at the southeast corner of the project site, along NE 119th Street. This substation has some existing capacity to serve a portion of the proposed industrial properties development depending on electrical demand. The existing substation has capacity to provide approximately 5.5 MW.
Improvements/Extensions: Electrical service to the industrial development would require installation of backbone electrical infrastructure to a central area of the project. Additional electrical infrastructure in the form of distribution conduits and conductor and distribution transformers would also be needed.
If the project demand is greater, then a new substation would be needed somewhere in the project. This substation could be setup with a redundant transmission source and with redundant transformers to improve system reliability depending on the ultimate users' power needs.
Electrical system upgrades are paid for by the developer.

Water System
Provider: Clark Public Utilities
Current Infrastructure: Water Mains in NE 117th Ave (10"/12" Water Main), NE 119th Street (12" Water Main), and NE 144th Street (12" Water Main), NE 124th Street (12" Water Main)
Improvements/Extensions: Water service to the project would need to be extended along the major roadways to provide water for processing, potable water needs, and fire protection. It is anticipated that water main extensions would need to be at least 12" diameter and improvements to the existing off-site water system will likely be required to increase capacity to the site.

Natural Gas
Provider: NW Natural
Current Infrastructure: 6" Main in NE 117th Ave (Hwy 503)

Improvements/Extensions: : NW Natural is planning significant backbone infrastructure reinforcement in this area within the next few years that will exceed the 2,000-5,000 mcf/month demand usage load requirement identified in the utility scoping document.

Data/ Communications

Provider: CenturyLink

Current infrastructure: Fiber optic data infrastructure is installed along Highway 503 (NE 117th Avenue), in NE 159th Street, and NE 119th Street. Copper data infrastructure is installed in various locations around the perimeter of the proposed industrial property, see Utility exhibit for locations.

Improvements/Extensions: Data and phone service to the project would need to be extended along the major roadways to provide data for future businesses.

LEGEND

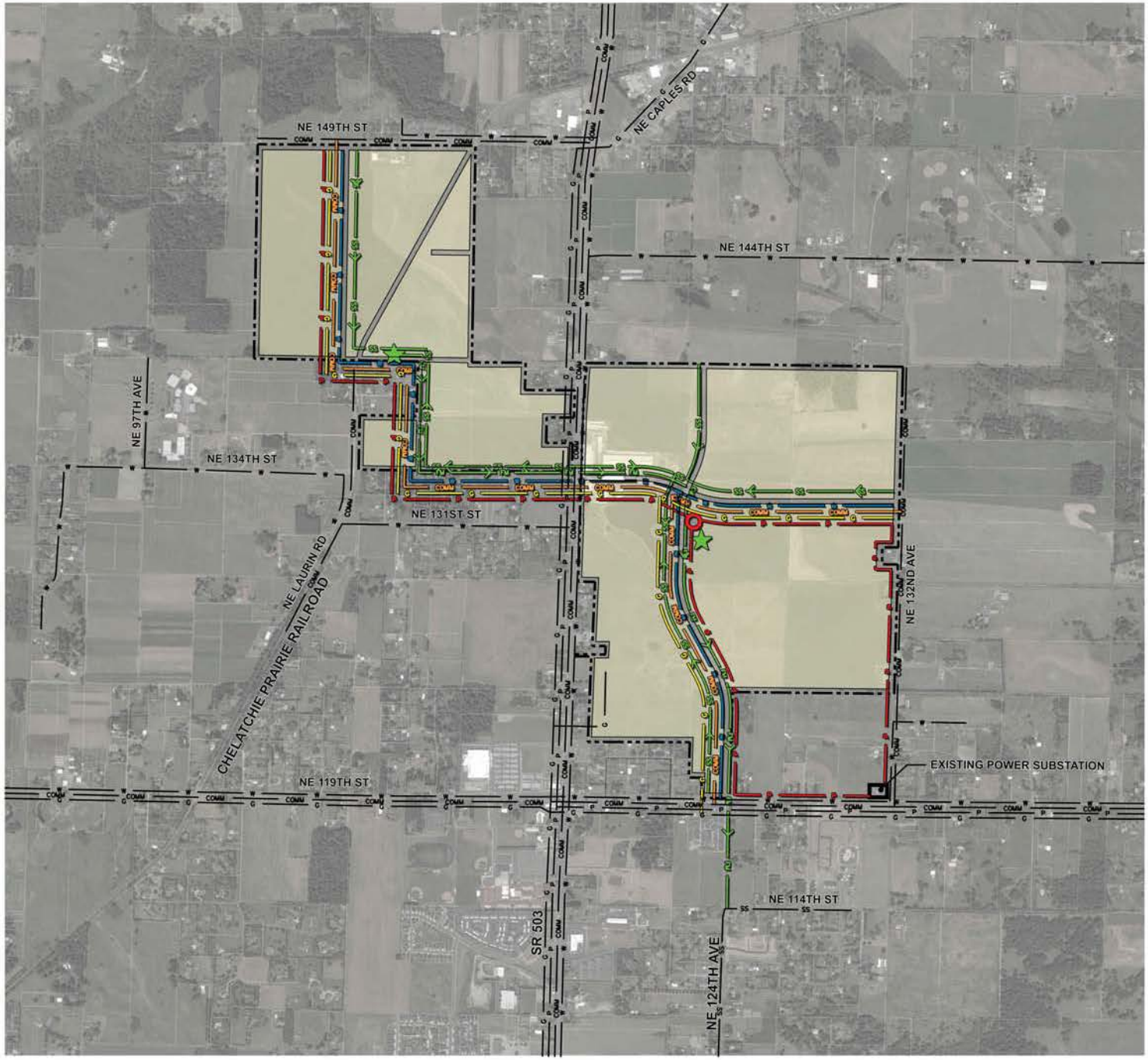
- PROPERTY LINE
- DEVELOPABLE ACREAGE

EXISTING UTILITIES

- WATER
- SEWER
- GAS
- POWER
- POWER SUBSTATION
- COMMUNICATIONS

PROPOSED UTILITIES

- WATER (CLARK PUBLIC UTILITIES)
- SEWER FORCED MAIN (CLARK REGIONAL WASTEWATER DISTRICT)
- GRAVITY SEWER (CLARK REGIONAL WASTEWATER DISTRICT)
- SEWER PUMP STATION
- GAS (NW NATURAL)
- BURIED POWER (CLARK PUBLIC UTILITIES)
- 12.5 KV POWER DISTRIBUTION POINT
- COMMUNICATIONS (CENTURY LINK)



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CLARK COUNTY RURAL INDUSTRIAL LAND BANK

LAND USE UTILITY CONCEPT PLAN

JULY 2015

MacKay Sposito

APPENDIX F: TRANSPORTATION ANALYSIS, DOCKET SITE

KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING
610 SW Alder Street, Suite 700, Portland, OR 97205 P 503.228.5230 F 503.273.8169

MEMORANDUM

Date: September 9, 2015

Project #: 17862

To: Lisa Grueter, AICP
BERK Consulting
2025 First Avenue, Suite 800
Seattle, WA 98121

From: Chris Brehmer and Julia Kuhn

Project: Clark County Rural Industrial Land Bank

Subject: Transportation Findings - DRAFT

This memorandum summarizes transportation related information in support of the Clark County Rural Industrial Land Bank project (herein referred to as RILB). Specifically, information is provided related to the range of anticipated site trip generation, supporting roadway infrastructure needs, and future analysis considerations.

TRIP GENERATION

Preliminary trip generation estimates for the RILB site were developed based on land use assumptions identified by MacKay Sposito in July 2015. The land use analysis identifies a total of 383 acres of developable land.

Per conversations with the project team, the land likely would be developed within a range of 15 to 25 percent building coverage for typical industrial developments, yielding a potential for approximately 2.5 million to 4.2 million square feet of building area. The trip generation associated with industrial facilities could vary widely depending on the actual tenants and the amount of on-site employment. In the past, many industrial users had a large number of employees who worked over multiple shifts; today, some industrial users are more automated and require much fewer employees per square foot. In addition, industrial sites are also being used for “server farms” by large tech firms that also have a very low employee density. Finally, the presence or absence of office or commercial services within the site will also influence trip generation.

We prepared a range of trip generation estimates to offer order-of-magnitude insights into the trip potential associated with the RILB. Trip estimates were prepared using trip rates obtained from the standard reference, *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers (ITE).

Table 1 below summarizes a range of trip estimates for the RILB area[1].

Table 1 Trip Generation Estimates

Land Use Category	ITE Code	Daily Trips	Weekday AM Peak Hour			Weekday PM Peak Hour		
			Total Trips	In	Out	Total Trips	In	Out
15% Building Coverage (2,502,500 square feet of building space)								
All Industrial Park	130	17,100	2,050	1,680	370	2,125	445	1,680
All Business Park	770	31,100	3,505	2,980	525	3,155	820	2,335
75% Industrial Park & 25% Business Park	130/ 770	20,600	2,415	2,005	410	2,385	540	1,845
75% Warehousing & 25% Business Park	150/ 770	14,500	1,440	1,190	250	1,390	355	1,035
25% Building Coverage (4,170,900 square feet of building space)								
All Industrial Park	130	28,500	3,420	2,805	615	3,545	745	2,800
All Business Park	770	51,900	5,840	4,965	875	5,255	1,365	3,890
75% Industrial Park & 25% Business Park	130/ 770	34,300	4,025	3,345	680	3,975	900	3,075
75% Warehousing & 25% Business Park	150/ 770	24,100	2,400	1,985	415	2,315	590	1,725

As shown in Table 1, depending on the scenario ultimately developed, the trip generation potential of the RILB site assuming all business park uses is more than double that of a scenario that could include a mix of uses and/or a large component of warehousing. Development of the RILB as a business park would reflect a mixture of industrial, office, and commercial retail uses. It is also possible that the overall site trip generation could be lower than the estimates in Table 1, particularly if a large, highly mechanized tenant or server farm occupies the site and/or if a large tenant that relies heavily on rail transport occupies a large portion of the site.

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[1] Note: *Trip Generation* describes industrial parks as follows: "Industrial parks contain a number of industrial or related uses. They are characterized by a mix of manufacturing, service, and warehouse facilities with a wide variation in the proportion of each type of use from one location to another. May industrial parks contain highly diversified facilities – some with a large number of small businesses and others with one or two dominant industries."

Trip Generation describes business parks as follows: "Business parks consist of a group of flex-type or incubator one- or two-story buildings served by a common roadway system. The tenant space is flexible and lends itself to a variety of uses, the rear side of a building is usually served by a garage door. Tenants may be start-up companies, or small mature companies that require a variety of space. The space may include offices, retail and wholesale stores, restaurants, recreation areas and warehousing, manufacturing, light industrial, or scientific research functions. The average mix is 20/30 percent office/commercial and 70 to 80 percent industrial/warehousing."

Trip Generation describes warehousing as follows: "Warehouses are primarily devoted to the storage of materials, but they may also include office and maintenance areas."

At this point, the estimates provided in Table 1 are merely to offer an order of magnitude estimate for general transportation facility system needs associated with development of the RILB. Prior to any site development, the actual site trip estimates will need to be refined for State Environmental Policy Act (SEPA) and transportation concurrency review purposes. Trip estimate refinement will vary depending on the actual tenants proposed for the site.

Transportation Demand Management

The vehicular trip generation associated with development of the RILB area will have direct implications on roadway capacity and delay. As future details related to specific land users become available, Transportation Demand Management (TDM) strategies to provide multimodal travel options for employees and visitors will be pursued and will vary depending on the tenants as well as the future availability of transit service. Potential TDM transportation demand management strategies could include, but are not limited to:

- Scheduling of shift work to avoid simultaneous peaking of employee travel demand from the various tenants within the RILB area (e.g., spreading site arrivals and departure patterns vs. arrival/dismissal periods that correspond and match peak travel demand along SR 503);
- Provision of transit service to the area through C-Tran (C-Tran does not currently provide fixed route transit service along roadways fronting the site);
- Providing pedestrian and bicycle connectivity to adjacent neighborhoods;
- Actively facilitating rideshare, shuttle service, carpool or vanpool arrangements; and/or
- Encouraging use of rail shipping vs. roadway-based shipping.

TRANSPORTATION INFRASTRUCTURE CONSIDERATIONS

The project team developed a conceptual plan to integrate land use, transportation, wetland and storm water system needs. Key transportation infrastructure elements and considerations are described below, along with their application to the concept land use plan.

Roadway Elements

The study area is bisected by SR 503, a five-lane state highway operated and maintained by the Washington State Department of Transportation (WSDOT). SR 503 is designated as a limited access state highway and is intended to convey commuter and freight trips from community to community efficiently. Because of the limited access designation, direct driveway access to SR 503 is discouraged and new developments are directed to other roadways for access where possible. Further, WSDOT seeks a minimum half-mile spacing of traffic signals along the segment of SR 503 in the study area.

For the purposes of the RILB development, it is likely that direct access to SR 503 would occur at one new signalized intersection on SR 503 and that other trips would access the site through Clark County roadways linking to the existing signalized NE 119th Street/SR 503 and NE 149th Street/SR 503 intersections. The likely access scenario is discussed in further detail below.

County Circulation Plan Considerations

Beyond SR 503, Clark County operates and maintains the roadway network surrounding the site including key north-south and east-west roadways. Clark County's SR 503 Circulation Plan includes transportation system needs for the site. Exhibit 1 illustrates the County's Circulation Plan. This plan seeks to develop a network of east-west and north south County roadways that augment SR 503 and offer alternate access to most properties with SR 503 frontage (facilitating restricted driveway access to SR 503). Note that the approximate boundary of the proposed industrial land bank is shaded light yellow in Exhibit 1 for ease of identification.

Exhibit 1 SR 503 Circulation Plan

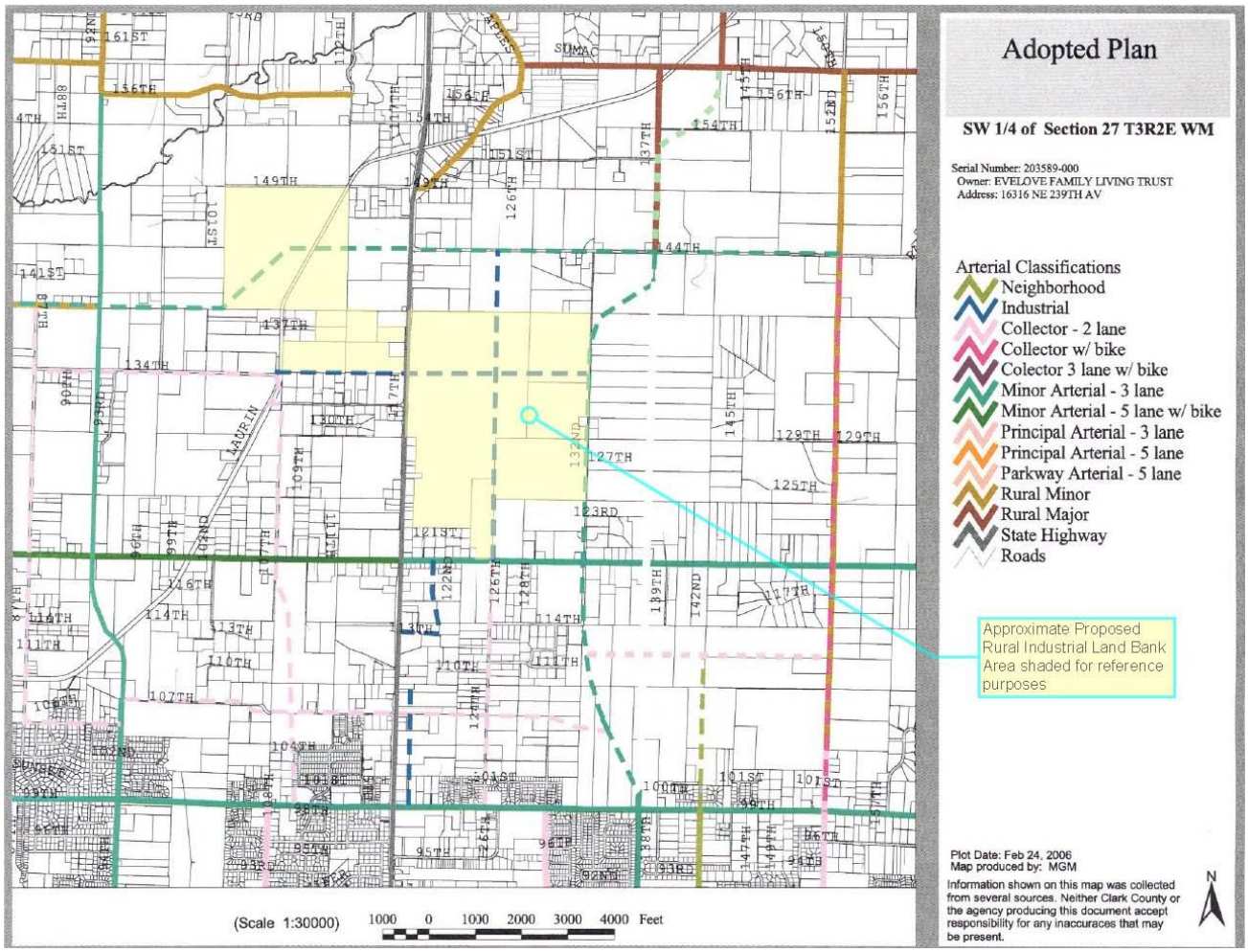


Image Source: Clark County, http://www.clark.wa.gov/planning/Transportation/sr503.html

Exhibit 1 depicts a new north-south industrial roadway (approximate location of NE 124th – NE 126th Avenue) traveling through the proposed land bank area located east of SR 503. This new roadway would provide connectivity between NE 119th Street and NE 144th Street. Similarly, a new east-west industrial roadway (approximate location of NE 134th Street) is shown through the proposed land bank area linking SR 503 and NE 132nd Avenue. West of SR 503, the circulation plan identifies the extension of NE 144th Street and NE 134th Street from SR 503 continued to points west of the study area and NE 93rd Street. Finally, the plan shows an upgrade of SE 132nd Avenue to minor arterial standards along the eastern site frontage with connections continuing south to NE 99th Street and north to NE 144th Street. While not specifically highlighted by the circulation plan, WSDOT's minimum half-mile spacing criteria for signalized intersections along SR 503 effectively limits a potential future signal location to NE 134th Street given the existing signalized intersections at NE 119th Street and NE 149th Street-NE Caples Road.

Rural Industrial Land Bank Concept Plan Transportation Considerations

The conceptual land use plan identified by the project team is reflected in Exhibit 2 and incorporates the north-south and east-west collector facilities identified in the SR 503 Circulation Plan east of SR 503.

Exhibit 2 Rural Industrial Land Bank Concept

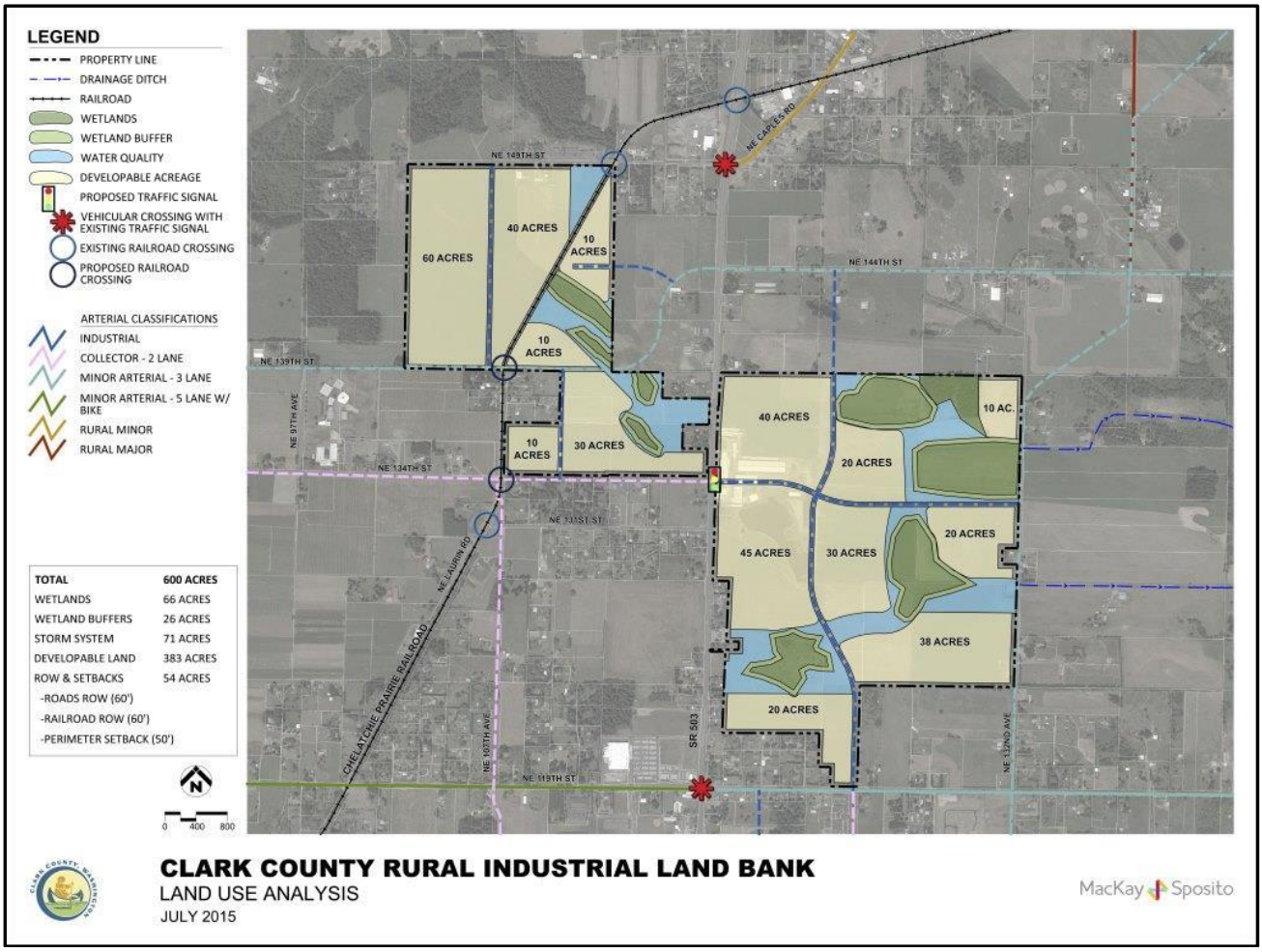


Image Source: MacKay Sposito

The southern terminus of the new north-south roadway east of SR 503 shown in Exhibit 2 would be aligned with NE 124th Avenue and could allow for signalization of the intersection with NE 119th Street if warranted. Exhibit 2 also identifies an east-west collector roadway west of SR 503 linking the existing terminus of NE 134th Street east to a new signalized intersection with SR 503 (consistent with the SR 503 Circulation Plan and WSDOT signal spacing requirements). The NE 134th Street extension west of SR 503 is shown to continue east of SR 503 to NE 132nd Avenue as a primary industrial roadway. The alignment of the new NE 134th Street east-west roadway is proposed in a manner that links the Rural Industrial Land Bank areas east and west of SR 503 while avoiding direct connection to residential housing on the west side of SR 503 (thus providing separation between existing residential homes with access oriented to NE 131st Street and future industrial traffic, particularly heavy vehicles).

West of SR 503, the NE 139th Street-NE 144th Street extension shown in the SR 503 Circulation Plan is accommodated through an alignment that maximizes developable area within the RILB properties while seeking to minimize wetland impacts. While the new NE 139th Street arterial is shown as aligned with NE 144th Street at SR 503, alignment of the roadways east and west of SR 503 may not be required. Access from NE 139th Street to SR 503 is expected to be limited to right-turns only (WSDOT's

half-mile signal spacing requirements will not accommodate signalization of the NE 144th Street/SR 503 intersection) given the intersection's close proximity to the existing signal at NE Caples Road. This limited access would likely need to be controlled by a raised median. In the case of limited access that is controlled by a median, the east and west approaches of NE 139th Street to SR 503 could be offset.

A new north-south collector is proposed between SR 503 and the Chelatchie Prairie Railroad to link NE 134th Street and NE 139th Street. This connection and a new north-south industrial roadway linking NE 139th Street to NE 149th Street west of the railroad tracks provide the RILB properties west of SR 503 (and other surrounding properties) two connections to traffic signals on SR 503 (NE 134th Street and NE 149th Street) while minimizing new crossings of the Chelatchie Prairie Railroad.

Table 2 summarizes key differences between the proposed RILB Concept and the SR 503 Circulation Plan.

Table 2. Comparison of Land Bank Concept and SR 503 Circulation Plan Roadway Infrastructure

SR 503 Circulation Plan	Rural Industrial Land Bank Concept	Notes
East-west arterial at NE 119th Street with existing traffic signal at SR 503.	Assumes east-west arterial at NE 119th Street with existing traffic signal at SR 503.	Proposal consistent with plan.
East-west industrial roadway at NE 134th Street with implied traffic signal at SR 503 and connection to existing NE 134th Street at NE Laurin Road (including new railroad crossing).	Provides east-west NE 134th Street corridor. Assumes industrial roadway designation east of SR 503, traffic signal at SR 503, and collector designation to existing NE 134th Street collector at NE Laurin Road (including new railroad crossing).	Proposal consistent with plan east of SR 503. Proposal provides *collector* west of SR 503 (avoids linking SR 503 arterial with existing NE 134th Street collector via an industrial section).
Assumes east-west minor arterial at NE 144th Street with implied traffic signal at SR 503 and new railroad crossing.	Completes NE 139th Street-NE 144th Street corridor connection with and new railroad crossing. Proposal assumes right-turn only access at NE 144th Street/SR 503 and provides north-south collector linking NE 134th Street and NE 139th Street as well as north-south industrial roadway designation linking NE 149th Street and NE 139th Street.	Proposal consistent with plan. Proposal supplements plan with north-south connectivity between NE 134th Street, NE 139th Street, and NE 149th Street given right-turn only restrictions at NE 149th Street/SR 503 intersection.

The changes summarized in Table 2 are proposed in an effort to capitalize on the vision offered by the SR 503 Circulation Plan while also:

- Minimizing interaction of future RILB trips (particularly heavy vehicles/freight) with existing residential traffic;
- Complying with WSDOT traffic signal spacing requirements along SR 503 while capitalizing on existing signalized intersection locations;
- Providing connectivity options both within the RILB as well as to adjacent neighborhoods;
- Providing evenly spaced future traffic signals along SR 503 (to allow for future traffic signal coordination/progression); and
- Minimizing the number of potential new crossings of the Chelatchie Prairie Railroad.

SR 503 Access Considerations

WSDOT regulates access to SR 503 and will be responsible for the operations and maintenance of future intersections and traffic signals along the roadway. WSDOT seeks to maintain north-south mobility and safety along SR 503 and will seek to minimize the number of new driveways and traffic signals along SR 503. The following considerations were accounted for while developing the transportation concept shown in Exhibit 2.

- Existing traffic signals are located on SR 503 at NE 119th Street and NE 149th Street and their location will be preserved in the future.
- As of 2014, approximately 24,000 to 26,000 vehicles per day were projected to traverse the segment of SR 503 between NE 119th Street and NE 149th Street per data in WSDOT's *2014 Annual Traffic Report.*
- Additional future lanes are anticipated to serve future travel demand at the NE 119th Street traffic signal and are expected to be required of future development projects impacting the intersection. This intersection is projected to operate near capacity during the weekday PM peak hour based on recent concurrency approvals[2] and is expected to receive additional turn lane improvements to add capacity in the future (likely to be provided in conjunction with private development).
- The NE 149th Street-NE Caples Road traffic signal operates well under capacity today based on recent studies in the area. It appears that additional turn lane improvements at the

[2] *Brush Prairie Mini Storage Transportation Impact Analysis*, May 2014, projects the SR 503/NE 119th Street intersection will operate at Level of Service "D" and a volume-to-capacity ratio of 0.85 during the weekday AM peak hour and a Level of Service "E" and a volume-to-capacity ratio of 0.95 during the weekday PM peak hour upon buildout of approved projects.

existing intersection could be provided to add future capacity (likely to be provided in conjunction with private development).

- Future traffic signals along SR 503 will require WSDOT approval. Only one additional signal will be allowed between NE 119th Street and NE 149th Street-NE Caples Road to provide for continued north-south mobility on SR 503.
- Provision of a traffic signal at NE 134th Street approximately mid-way between the existing traffic signals at NE 119th Street and NE 149th Street would offer preferred signal spacing for traffic progression purposes and satisfy WSDOT's minimum half-mile signal spacing criteria.
- WSDOT has indicated NE 144th Street will not be signalized at SR 503.
- A continuous center left-turn lane is currently provided on SR 503 between NE 149th Street and roughly NE 123rd Street. Based on WSDOT access management goals, it is expected that future driveways along the roadway (if allowed) will be restricted to right-turns only and that raised median treatments will be installed at non-signalized locations. Right-turn deceleration lanes should also be anticipated as a requirement at future driveways.
- Primary access to the RILB area should be sought via County roadways as opposed to direct connections to SR 503.

Railroad Elements

The Chelatchie Prairie Railroad will directly traverse the western portion of the RILB area. The railroad crosses SR 503 north of NE 149th Street as shown in Exhibit 2.

We expect that future land bank tenants seeking railroad access would be best served if located on the west side of SR 503 where rail siding connections could be made to the existing railroad tracks. In our opinion, approval of a second at-grade railroad crossing of SR 503 to serve the eastern portion of the RILB area is unlikely. If rail access to the site area east of SR 503 is sought, such access would likely either involve a connection to the existing Chelatchie Prairie Railroad tracks located east of SR 503 (new spur line), or grade separation of a new connection over SR 503. Both options could be costly and require significant time and resources to get approvals from the railroad.

The current RILB area shown in Exhibit 2 involves two new crossings of the existing railroad tracks (one crossing at NE 134th Street and one crossing at NE 139th Street). If at-grade crossings are provided, it is expected that active warning devices including gates, lights, and audible devices will be required.

It should be noted that there is a 10-acre triangular property shown within the Rural Industrial Land Bank area directly south of NE 149th Street that is bordered by the railroad tracks to the north and west and wetlands/water quality areas to the south. The current land use plan anticipates this 10-acre property could be served by access to the east (though off-site properties). Access to the west would likely require a separate railroad crossing to serve this property and addition of another at-grade railroad crossing to serve this property may be challenging.

Potential Off-site Mitigation Needs

In addition to the implied construction of new on-site primary and secondary commercial/industrial vehicular roadways discussed above, development of the RILB Concept has the potential to trigger off-site transportation improvements. Specific off-site transportation mitigation requirements will be determined in the future through site plan application and transportation concurrency review per the requirements of Clark County and WSDOT.

Preliminary travel demand model data was reviewed at a planning level to identify potential transportation system needs (refer to preliminary capacity assessment discussion below); however, no detailed effort to quantify off-site transportation impacts has been prepared to date. Notwithstanding a formal transportation concurrency review, at a conceptual level, off-site transportation infrastructure improvement requirements may include (but are not limited to):

- Widening of NE 149th Street along the site frontage as well as the segment east of the RILB towards SR 503, potentially including reconstruction of the existing Chelatchie Prairie Railroad grade crossing of NE 149th Street (reconstruction likely to be needed to accommodate wider travel lanes on NE 149th Street over the railroad tracks, a reconstructed railroad crossing surface with concrete panels, potential corresponding relocation of the railroad gates and warning lights, etc.)
- Turn lane improvements (additional capacity and queue storage) at the existing signalized NE 149th Street-NE Caples Road/SR 503 intersection.
- Implementation of raised median treatments along the SR 503 site frontage between NE 139th Street and NE 134th Street and between NE 134th Street and NE 119th Street (a median break will be provided for the new traffic signal at NE 134th Street), including provision of street lighting (illumination) along the new median.
- Construction of a new traffic signal on SR 503 at NE 134th Street, including potential traffic signal interconnect (communications) with existing traffic signals on SR 503 at NE 119th Street and NE 149th Street-NE Caples Road (access and new traffic signal subject to WSDOT approval).
- Construction of turn lane improvements (additional capacity and queue storage) at the existing signalized NE 119th Street/SR 503 intersection.
- Construction of a traffic signal at the NE 119th Street/NE 124th Avenue (future north-south roadway connection to NE 119th Street) intersection, including provision of eastbound and westbound left turn lanes on NE 119th Street.
- Widening or other site frontage improvements along NE 132nd Avenue, particularly at the new east-west roadway connection and at the intersections with NE 119th Street and NE 144th Street where additional turn lanes may be required.

Preliminary Capacity Assessment

Southwest Washington Regional Transportation Council (RTC) prepared travel demand modeling forecasts to help identify potential transportation capacity needs associated with development of the RILB lands. Specifically, RTC prepared an analysis of roadway segment volume-to-capacity ratios in the area surrounding the site under year 2010 and 2035 conditions. Year 2035 conditions were analyzed assuming the 2004-2024 Comprehensive Plan Comprehensive Plan/zoning and were then re-analyzed assuming development of the RILB properties at a density of nine jobs per acre and assuming the new collector roadway network connections. The RTC analyses included separate transportation analysis zones for the RILB properties east and west of SR 503.

The following generalized findings were derived from the RTC modeling:

- Regional travel demand patterns in the future will continue to be primarily oriented north-south as opposed to east-west.
- The proposed road network was found to help distribute RILB-generated trips away to other roadways besides SR 503. In particular, the new 139th Street arterial through the RILB property west of SR 503 serves the new uses and reduces reliance on SR 503, thereby providing an overall benefit to the transportation system. In addition, this roadway is forecast to operate well under-capacity even with RILB development.
- With the proposed road network in place, there is sufficient capacity along SR 503 and County-maintained collectors and arterials in the vicinity to accommodate development of the RILB properties for industrial use.

NEXT STEPS

The material provided in this letter should be considered as informational for planning purposes. In the future, a detailed traffic impact analysis will be required prior to site development. The traffic impact analysis will need to account for other approved in-process development, more specific site land-use assumptions, growth in regional traffic volumes as phased development occurs, and other typical study requirements. The traffic impact analysis will need to address regulatory review elements such as WSDOT's access management, safety and intersection performance requirements, Clark County's intersection performance requirements, driveway spacing standards, transportation concurrency review requirements, Transportation Demand Management measures, and other SEPA related considerations.

Please let us know if you have any questions regarding the information presented herein.

APPENDIX G: 2007 EIS SUMMARY EXCERPT

SUMMARY

I. What is being proposed?

Clark County and the cities and towns of Battle Ground, Camas, La Center, Ridgefield, Vancouver, Washougal, and Yacolt are proposing to revise their Comprehensive Growth Management Plans (the GMA plans) to comply with the requirements of the Growth Management Act (GMA). The revisions focus on changes to the Urban Growth Areas (UGAs[1]) to accommodate projected growth over the next 20 years.

This Draft Environmental Impact Statement (DEIS) evaluates the environmental impacts of different ways of managing the projected population and job growth. Clark County is considering the potential environmental impacts of a No Action Alternative that would not expand the UGAs and two Alternatives with expanded UGAs. The DEIS analysis can be used to help decision makers and the public to choose or develop a Preferred Alternative that will be evaluated in the final EIS (FEIS) and form the basis of a new 2006 Plan.

The County's stated objective for the new 2006 Plan is to accommodate the projected demand for jobs and housing by 2024 based on new growth assumptions, to implement land use patterns that reflect local preferences and values (see pages 24-25 for a summary of principles and values), and to minimize impacts on the environment, schools, and the cost of infrastructure by fine-tuning the location of expansion areas.

In accordance with the regulations of the State Environmental Policy Act (SEPA), the DEIS consists of a summary and an abbreviated discussion of the impacts of the different alternatives. A technical document attached to the DEIS and incorporated by reference provides more information on all the topics found in the summary section and documents the environmental impacts in more depth. For backup or background information to all of the topics presented in the DEIS readers are directed to the Technical Document.

II. What is the Growth Management Act?

The Growth Management Act (GMA) was enacted by the state legislature in 1990. It requires high population counties and fast-growing counties to develop comprehensive plans to balance the needs of housing and jobs with preservation of resource lands (for agriculture, forestry and mining) and critical areas (such as habitat, wetlands and areas subject to flooding). Clark County was required to prepare a plan because it met both the population and growth rate criteria. The county adopted its first comprehensive plan in 1994 and completed its first comprehensive plan update in 2004. The EIS for the Comprehensive Growth Management Plan for Clark County (2003) is incorporated by reference in this DEIS.

III. What is the State Environmental Policy Act?

The State Environmental Policy Act (SEPA) was enacted by the state legislature in 1984. It requires local governments to evaluate the environmental impacts that may result from actions they approve or that they undertake. Projects that are not direct proposals for development, such as the adoption of code language or a new program, are called "non-project actions" and they also require review under SEPA.

Projects or non-project actions that are expected to have significant impacts require the most analysis, typically in the form of an environmental impact statement (EIS). EISs require agencies to compare

[1] What are UGAs? They are areas where urban growth will be encouraged. Counties and cities planning under GMA must cooperatively establish the urban growth areas and cities must be located inside urban growth areas. Growth outside urban growth areas must be rural in character.

impacts from the proposed action against impacts from one or more alternatives, of which one of the alternatives must be the option of not doing the project. The expansion of urban growth boundaries (a non-project action) requires a greater level of analysis, which is why the County has prepared an EIS.

IV. What is a Growth Management Plan?

The Growth Management Act (GMA) was enacted by the state legislature in 1990. It requires high population counties and fast-growing counties to develop comprehensive plans to balance the needs of housing and jobs with preservation of resource lands (for agriculture, forestry and mining) and critical areas (such as habitat, wetlands and areas subject to flooding). Clark County was required to prepare a plan because it met both the population and growth rate criteria. The comprehensive plan and plan map together must provide a land supply adequate to accommodate the projected 20-year demand for jobs and housing as estimated by the Office of Financial Management.

Several amendments to the GMA have occurred in 1990. The DEIS for the Comprehensive Growth Management Plan for Clark County (2003) listed key changes to the GMA between 1995 and 2001. Key changes between 2001 and 2005 are contained in Appendix A at the end of the Technical Document.

V. Why are the Growth Management Plans being revised?

The Board of County Commissioners (Board) adopted the first update to the 1994 comprehensive plan in 2004. This is the plan that is currently in effect. The 2004 plan was challenged on a number of grounds. The Boards subsequently decided to revisit several of the assumptions made in the 2004 plan, resulting in a proposal to again expand the urban growth boundaries to include enough land to accommodate 20 years of projected job and population growth.

Between May 2005 and March 2006, staff and the Board received input from the cities and from the public about how and where to add land to the cities' urban growth areas (UGAs). From this input the BOCC did three things. First, the Board developed a list of principles and values to help guide development in the next 20 years. Some of these relate to where land should develop, and some relate to how land should develop (see pages 24-25 for a summary of principles and values).

Next, the Board developed a set of planning assumptions to be used in analyzing the effects of expanding UGAs for the various alternatives. The planning assumptions have to do with growth rates, population, and jobs per acre, and are listed below. Comments in parentheses indicate similarities or differences with the assumptions of the 2004 Plan.

- A total population of 584,310 by 2024, from an annual growth rate of 2.0 percent, with 2.2 percent assumed in 2004-2010 for capital facilities planning purposes (2004 Plan: annual rate of 1.67 percent)
- Population growth of 192, 635; 90 percent of the population would live in urban areas; 10 percent in rural areas
- A residential market factor of 10 percent; no market factor for commercial, industrial or business park (2004 Plan: 25 percent for business park and commercial; 50 percent for industrial)
- 66,939 new dwelling units needed for households in urban areas and 138,312 new jobs by 2024
- Currently built land would be redeveloped, absorbing five percent of the projected population and job growth (same as 2004 Plan)
- 2.59 persons per household (2004 Plan: 2.69 pph)
- 20 employees per commercial acre; 9 employees per industrial acre; and 20 employees per business park acre (same as 2004 Plan)

- Average residential densities in urban areas would be 8 units per net acre for Vancouver, 4 units per net acre for La Center, 6 units per net acre for Battle Ground, Ridgefield, Camas and Washougal, and no minimum for the town of Yacolt (same as 2004 plan)

- Infrastructure factor of 27.5 percent for residential development and 25 percent for industrial and commercial development.

- No expansion of Yacolt or Woodland UGAs.

- No more than 75 percent of any product type of detached/attached housing.

Lastly, the Board developed the alternatives that are the focus of the DEIS process. There are three alternatives evaluated in the DEIS. SEPA requires that there be a No Action Alternative. In the DEIS, Alternative 1 is the No Action Alternative, which means the UGAs would remain as they are now. Alternative 2 includes UGA expansions to accommodate job and population growth projected over the next 20 years. Alternative 3 includes additional expansion areas beyond Alternative 2 but only as options for adjusting the boundaries in Alternative 2. More detail about the Alternatives can be found on pages 19-22 of this DEIS.

The purpose of the SEPA process is to disclose potential impacts. By disclosing the potential impacts of three alternatives and by soliciting public and agency input through the DEIS process, Clark County and its cities expect to develop a Preferred Alternative that will be the subject of an FEIS, and that will ultimately be consistent with the GMA.

VI. What are the differences between the alternatives and their impacts?

All of the alternatives assume the same 2 percent rate of growth of population and employment. In the next 20 years it is expected that about 192,000 more people would live in Clark County (for a total population of about 584,000). It is assumed that 90 percent of these (about 173,000) would settle in urban areas, with the remaining 10 percent moving to rural areas. This would require about 67,000 new dwelling units in urban areas and the need for about 138,000 new jobs. (For current urban and rural county zoning, refer to Figure 41, Clark County 2004 Zoning Map.)

The difference between the alternatives is in where the growth would occur.

Alternative 1 is the No Action Alternative, as previously stated. Under Alternative 1, urban growth areas would not be expanded (see Figure 2). This means that an expected 173,000 new residents would need to be accommodated in the current UGAs. Without increasing the planned densities in some areas, or changing the growth assumptions, the urban areas as planned would not have sufficient land to accommodate approximately 54,000 people, or approximately 21,000 households. Keeping the current boundary would require upzoning or increasing densities of dwelling units and jobs in existing UGAs. Increasing densities would make more efficient use of current infrastructure (for roads, schools, wastewater and water supply) and land. Subsequent upzoning would also create additional impacts not anticipated by the current zoning, primarily with respect to increased impervious surface, lower levels of service for parks and recreation, and a higher proportion of travelers using alternative transportation modes.

It is expected that under this alternative the result would be a lower number of congested lane miles, vehicle hours of delay and vehicle miles traveled; and a somewhat higher share of transit and non-motorized modes, as compared to Alternative 2. The I-5 and I-205 bridges would be operating at or near failing levels of service at a.m. peak times, which would affect the flow of traffic at interchanges and connecting streets. Maintaining acceptable levels of service is estimated to cost between $576 million and $609 million (2006-2024). Proposed projects to mitigate this alternative would be between $98.5 and $124.5 million.

Alternative 2 is the principal Action Alternative proposed by the county (see Figure 3). Under Alternative 2, the 2005 Discussion Map alternative), the urban growth areas would be expanded about 10,850 acres, a little less than 17 square miles. This means that the expected 173,000 people in urban areas would be accommodated both in the current UGAs and in the expanded UGAs. The other 19,000 people would be accommodated in rural areas. Given the planning assumptions for growth rate and jobs/acre, the 10,850 acres represents the amount of land needed to accommodate the population and job growth projected in the next 20 years. Impacts on the environment consist primarily in bringing urban levels of development to land that is currently rural.

Building urban types of development in expanded UGAs would result in new impacts to the environment in those (currently rural) areas, but would not require upzoning in the existing UGAs and so would avoid those impacts cited under Alternative 1. Development would occur on land currently known to contain prime agricultural and forest soils. Forty-two (42) stream miles of surface water and 213 acres flood hazard areas would be added to UGAs. Given proposed land uses, there is a potential increase of about 5,700 acres of impervious surface. The county's critical areas ordinances, all of which have recently been revised, would be used to mitigate any site-specific impacts.

This alternative would result in a higher number of congested lane miles, vehicle hours of delay and vehicle miles traveled; and a somewhat lower share of transit and non-motorized modes, all as compared to Alternative 1. The I-5 and I-205 bridges would be operating at or near failing levels of service at a.m. peak times, which would affect the flow of traffic at interchanges and connecting streets. Maintaining acceptable levels of service is estimated to cost between $576 million and $609 million (2006-2024). Proposed projects to mitigate this alternative would be between $117.4 and $147.9 million. The additional costs are represented by one mitigation project estimated to cost $18.9 to $23.4 million.

Alternative 3 is different from the other two alternatives (see Figure 4). Alternative 3 looks at smaller individual subareas of potential expansion of the UGAs (Figures 4 through 11). Alternative 3 is intended to provide options for adjusting the UGA expansions proposed by Alternative 2. The subareas could be added to the UGAs while a same-sized area with environmental impacts could be removed from the expansion. The main reason for adjusting the boundaries in Alternative 2 would to avoid or reduce identified significant environmental impacts.

All of the Alternative 3 subareas could not be adopted as a whole alternative or as additive to Alternative 2 because sufficient infrastructure could not be provided to all of the land in the subareas in Alternative 3, which would be inconsistent with that GMA requirement. (See discussion of concurrency in the Public Facilities and Transportation elements.)

VII. How do all of the environmental impacts under the alternatives compare?

SEPA requires every DEIS to summarize the impacts and mitigation for each alternative. The summaries are presented in Tables 1 and 2, beginning on page 5.

VIII. How well do the alternatives meet the principles and values of the Board?

In September 2005 the BOCC identified numerous principles and values that should be reflected in the new plan and in determining the new UGA boundaries. The consistency of the alternatives with the BOCC's principles and values were evaluated and are rated in Table 3, beginning on page 14. The principles and values established by the BOCC are shown in the left-hand column of Table 3.

Table 1. *Summary of Impacts*

Earth, Air

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
Size of Subarea			41 acres	120 acres	1,243 acres	125 acres	534 acres	793 acres	614 acres	227 acres	362 acres
EARTH											
Soils and Geology: (acres)											
Acres of land with soils with severe limitations to foundations	22,109 acres	22,109 acres + 3,490 acres	18 acres	8 acres	419 acres	16 acres	375 acres	413 acres	391 acres	79 acres	159 acres
Land with prime agricultural soil converted to urban uses	51,856 acres	51,856 acres + 6,385 acres	1 acre	-	825 acres	81 acres	285 acres	398 acres	355 acres	129 acres	163 acres
Land with prime forest soil converted to urban uses	38,604 acres	38,604 acres + 7,184 acres	33 acres	112 acres	390 acres	117 acres	295 acres	480 acres	260 acres	150 acres	249 acres
Topography:											
Earthquake zone D: 2nd highest hazard zone[2]	18,703 acres	18,703 acres + 1,823 acres	1 acre	-	-	-	134 acres	26 acres	-	-	14 acres
Steep slopes over 40% slope	947 acres	947 acres + 96 acres	6 acres	-	3 acres	-	44 acres	12 acres	2 acres	-	-
Landslide hazard areas	3,631 acres	3,631 acres + 674 acres	9 acres	-	4 acres	-	99 acres	106 acres	55 acres	2 acres	40 acres
Erosion hazard areas	3,900 acres	3,900 acres + 824 acres	9 acres	-	34 acres	-	141 acres	113 acres	61 acres	-	32 acres
AIR	All alternatives have the potential to affect the air quality and climate. Impacts can be related to the balance between emissions from automobile use (vehicle miles traveled or VMT), emissions from unregulated private sources (e.g. gas lawnmowers), federal regulations through the Clean Air Act, and conversion of rural and resource land to urban land with less vegetative cover. For differences in VMT (full build-out capacity, not planned growth) see Transportation Impacts. For conversion of rural to urban land see the Rural and Resource land impacts.										

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
Size of Subarea	1,006 acres	875 acres	402 acres	908 acres	635 acres	219 acres	668 acres	809 acres	122 acres	21 acres
EARTH										
Soils and Geology: (acres)										
Acres of land with soils with severe limitations to foundations	182 acres	266 acres	75 acres	150 acres	31 acres	47 acres	527 acres	775 acres	122 acres	21 acres
Land with prime agricultural soil converted to urban uses	648 acres	538 acres	294 acres	710 acres	575 acres	172 acres	341 acres	250 acres	45 acres	21 acres
Land with prime forest soil converted to urban uses	923 acres	645 acres	310 acres	683 acres	635 acres	4 acres	47 acres	722 acres	122 acres	-
Topography:										
Earthquake zone D: 2nd highest hazard zone	804 acres	538 acres	-	41 acres	635 acres	-	-	16 acres	-	21 acres
Steep slopes over 40% slope	9 acres	-	-	5 acres	-	-	-	65 acres	-	-
Landslide hazard areas	108 acres	32 acres	23 acres	30 acres	-	-	-	160 acres	3 acres	10 acres
Erosion hazard areas	115 acres	2 acres	24 acres	5 acres	-	-	-	188 acres	12 acres	-
AIR										
Climate and air quality	All alternatives have the potential to affect the air quality and climate. Impacts can be related to the balance between emissions from automobile use (vehicle miles traveled or VMT), emissions from unregulated private sources (e.g. gas lawnmowers), federal regulations through the Clean Air Act, and conversion of rural and resource land to urban land with less vegetative cover. For differences in VMT (full build-out capacity, not planned growth) see Transportation Impacts. For conversion of rural to urban land see the Rural and Resource land impacts.									

[2] *None of the land proposed for UGAs in Alternative 2 contains Zone A land*

Water, Plants and Animals

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
Size of Subarea			41 acres	120 acres	1,243 acres	125 acres	534 acres	793 acres	614 acres	227 acres	362 acres
WATER											
Surface waters: miles of streams added to UGAs	185 miles	185 miles + 42.5 miles	0.2	-	7	-	6	6	6	1	3
Stormwater: Acres of new impervious surface	17,166 acres	17,166 acres + 5,722 acres	27	54	603	56	169	479	294	50	218
Shorelines: Acres of environment affected	6,414 acres	6,414 acres + 145 acres	-	-	209	-	67	-	-	-	-
Flood hazard areas: Acres in new UGAs	14,525 acres	14,525 acres + 213 acres	-	-	422	-	223	2	-	-	-
Groundwater:											
Acres of Category 1 Critical Aquifer Recharge Areas in new UGAs	4,010 acres	4,010 acres + 386 acres	-	-	70	-	4	71	-	3	-
Acres in 1-Yr Zones of Contribution in new UGAs	4,373 acres	4,373 acres + 8.9 acres	-	-	-	-	5	-	-	-	-
PLANTS AND ANIMALS											
Acres with Priority Species in new UGAs	7,384 acres	7,384 acres + 109.5 acres	-	-	46.7	-	225.5	-	-	9.7	55.1
Acres of Non-Riparian Priority Habitat Conservation Area	2,256 acres	2,256 acres +190.1 acres	-	-	3.7	-	-	-	5	-	-
Acres of Riparian Priority Habitat Conservation Area	7,314 acres	7,314 acres +1,321.5 acres	-	-	311.3	-	235	175.7	149.6	38.9	84
Wetlands in new UGAs	16,150 acres	16,150 acres + 1,406 acres	-	-	630	14	200	75	206	18	102

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
Size of Subarea	1,006 acres	875 acres	402 acres	908 acres	635 acres	219 acres	668 acres	809 acres	122 acres	21 acres
WATER										
Surface waters: miles of streams added to UGAs	4.8	4.7	2.2	2.6	-	.5	3.9	6	.6	.1
Stormwater: Acres of new impervious surface	427	597	184	400	409	88	563	399	60	18
Shorelines: Acres of environment affected	79	-	-	77	-	1	107	74	-	-
Flood hazard areas: Acres added to UGAs	91	-	25	83	-	1	578	33	0	21
Groundwater:										
Acres of Category 1 CARAs	2	-	18	-	-	-	27	1	-	-
Acres in 1-Yr Zones of Contribution	-	-	-	22	-	-	-	0.7	-	-
PLANTS AND ANIMALS										
Acres with Priority Species	16	-	8		-	-	308	-	-	16
Acres of Non-Riparian Priority Habitat Conservation Area	23	-	-			-	20		-	-
Acres of Riparian Priority Habitat Conservation Area	208	164	95	170		4	24	277	21	5
Wetlands	121	159	57	211	113	47	155	29	-	-

Energy Conservation, Environmental Health

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
Size of Subarea			41 acres	120 acres	1,243 acres	125 acres	534 acres	793 acres	614 acres	227 acres	362 acres
ENERGY CONSERVATION	Impacts on energy and natural resource conservation are not quantitatively comparable. Total energy impacts are more determined by overall growth and consumption by type of use, less so from patterns of expansion. Planned growth is the same for both Alternative 1 and Alternative 2. Impacts from growth based on potential land capacity (as opposed to planned growth) would likely result in greater impacts than planned, though that impact has not been measured in this DEIS. Growth based on capacity would be greatest under Alternative 2, because the land added to UGAs would accommodate more than the planned population. Impacts from VMT on energy (petroleum) use based on capacity for growth (full build-out) can be found in Transportation Impacts.										
ENVIRONMENTAL HEALTH											
Scenic Resources Only Alternative 2 would convert rural and resource land to urban uses, affecting scenic values adjacent to the new UGAs.	Pressure to increase density for planned population may impact scenic areas at the Columbia River shoreline and Vancouver Lake Lowlands	Conversion of about 11,000 acres to urban use would result in the loss of agricultural , forest, and rural lands that have scenic and visual values	Rural residential scenic values affected by extension of employment and residential zones	Potential impacts from extending low-density residential areas to the north	Employment and low-density residential zones abutting scenic areas near Lacamas Lake & creek		Low-density residential and industrial areas would replace agricultural scenic views	Extending industrial and medium density residential zones south would replace agricultural views	Residential low-density expanded on ag land designated as urban reserve	Residential industrial expanded on rural land to east; potential merge w/ La Center	Medium density residential industrial expanded on rural land; potential merge w/ Vancouver UGA
Noise	Impacts from noise not quantitatively compared. Higher noise impacts expected from increased traffic (see Transportation), from expansion of diverse urban uses into formerly rural areas (see Land Use, and Rural and Resource land comparisons).										

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
Size of Subarea	1,006 acres	875 acres	402 acres	908 acres	635 acres	219 acres	668 acres	809 acres	122 acres	21 acres
ENERGY CONSERVATION	Same impacts as described for the other subareas.									
ENVIRONMENTAL HEALTH										
Scenic Resources	Agricultural and rural residential land would be converted to urban low-density development.							Most change consists of conversion of farmland, rural residential to residential & industrial uses north of city limits		
Noise	Impacts from noise not quantitatively compared. Higher noise impacts expected from increased traffic (see Transportation), from expansion of diverse urban uses into formerly rural areas (see Land Use, and Rural and Resource land comparisons).									

Land Use, Economy, Historic and Cultural Resources

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
LAND USE											
Urban residential land capacity Difference between number of planned households and number of households at build-out; actual land capacity Planned new urban population: 173,372 (190,709 with 10% market factor) Planned households: 66,939 (73,633 with 10% market factor)	118,969 new residents in 45,934 dwelling units could be accommodated capacity deficit of 21,005 dwelling units Has actual capacity for 69% of planned growth	177,385 new residents (68,488 housing units) could be accommodated = surplus capacity of 1,549 dwelling units Has actual capacity for 102% of planned growth	Urban residential land capacity was not calculated for Alternative 3 subareas								
Rural residential land capacity (Difference between number of planned households and number of households at build-out; actual land capacity) Planned new rural population: 19,263 Planned new rural households: 7,437	29,422 new residents in 11,360 dwelling units could be accommodated = surplus capacity of 3,923 dwelling units Has actual capacity of 152% of planned rural growth	27,790 new residents in 10,730 dwelling units could be accommodated = surplus capacity of 3,292 dwelling units Has actual capacity of 144% of planned rural growth	Rural residential land capacity was not calculated for Alternative 3 subareas								
Rural Lands: Acres of rural land into new UGAs	-	3,004	41	120	794	98	223	279	316	32	76
Resource Lands: Acres into new UGAs											
Agricultural land	-	4,054	-	-	407	27	306	405	298	23	286
Forest land	-	154	-	-	-	-	-	-	-	-	-
Mineral land	-	229	-	-	-	-	-	-	-	-	-
ECONOMY											
Planned jobs to population ratio: Planned new jobs: 138,312 jobs Actual capacity for jobs to actual capacity for population	1:1.39 1:1.10 (114,026 jobs capacity to 118,969 population capacity)	1:1.39 (1:1.24 (136,382 jobs capacity to 177,385 population capacity)	Jobs to population ratio was not calculated for Alternative 3 subareas								
New industrial land	-	1,907	-	-	-	-	86	239	-	49	-
New Employment Center/Employment Campus	-	498	22	-	590	-	-	-	-	-	122
New commercial land	-	227	-	-	-	-	-	-	-	-	-
Employment capacity (% of land used for planned jobs)	**Has actual capacity for 82% of planned employment growth**	**Has actual capacity for 99% of planned employment growth**	Employment capacity was not calculated for Alternative 3 subareas								
HISTORIC AND CULTURAL RESOURCES	Would not add new urban development to high probability areas. Existing UGAs have 34,000 acres with moderate to high probability for cultural resources and 289 identified historic sites.	Much of the county has been identified as having a high probability for archaeological resources, in part because of the area's rich history and its importance as a settlement location. Many of the high probability areas are located along streams, rivers, and other water bodies. (See stream miles, above.) All subareas would include areas identified as having a high probability for archaeological resources. New UGAs have 7, 700 acres with moderate to high probability and 8 historic sites; Alternative 3 subareas have 10 historic sites.									

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
LAND USE										
Urban residential land capacity (Difference between number of planned households and number of households at build-out; actual land capacity)	Urban residential land capacity was not calculated for Alternative 3 subareas									
Rural residential land capacity (Difference between the number of planned households and number of households at build-out; actual land capacity)	Rural residential land capacity was not calculated for Alternative 3 subareas									
Rural Lands: Acres of rural land into new UGAs	70	68	-	-	248	-	55	654	107	-
Resource Lands: Acres into new UGAs										
Agricultural land	-	197	-	-	387	-	613	46	15	-
Forest land	-	-	-	-	-	-	-	-	-	-
Mineral land	-	-	-	-	-	-	-	46	29	-
ECONOMY										
Average jobs to population ratio: Planned jobs to population Actual capacity for jobs to actual capacity for population	Jobs to population ratio was not calculated for Alternative 3 subareas									
New industrial land	-	-	-	-	495	-	668	-	41	
New Office/Bus. Park land	-	875	-	-	-	-	-	-	-	-
New commercial land	-	-	-	-	-	-	-	31		
Employment capacity (% of land used for planned jobs)	Employment capacity was not calculated for Alternative 3 subareas									
HISTORIC AND CULTURAL RESOURCES	Much of the county has been identified as having a high probability for archaeological resources, in part because of the area's rich history and its importance as a settlement location. Many of the high probability areas are located along streams, rivers, and other water bodies. (See stream miles, above.) All subareas would include areas identified as having a high probability for archaeological resources.									

Transportation and Public Facilities

	Alternative 1	Alternative 2	Alternative 3 Subareas								
			Battle Ground		Camas		La Center		Ridgefield		
			B1	B2	C1	C2	L1	L2	R1	R2	R3
TRANSPORTATION											
Projected Vehicle hours of delay [Not calculated for Subareas]	3,379	4,518	Need new local access to SR 503; expect increased delays at SR 503 and 244th	Substantial trip generation; significant impacts to SR 503 and 244th would increase delays	Underserved by local network; two major corridors serving area projected to fail during peak hours	Insignificant increase beyond local network	Area south of river would substantially increase congestion at Paradise Park and La Center roads and interchange	Residential area would add to failing level of service at NW 11th and NW Spencer Road	Inadequate arterial & collector system for north of Pioneer Street	Impacts to I-5 interchange could be mitigated by improvements underway	Would need extension of new arterial west from I-5/219th interchange
Projected Vehicle Miles Traveled [Not calculated for Subareas]	1,070,911	1,076,081									
Projected Lane miles at LOS E/F [Not calculated for Subareas]	159	175									
Transportation costs to maintain LOS D [Not calculated for Subareas]	Capital projects and programs: $576-$609 million (m) Additional planned projects $200-233m Mitigation projects: $98.5-124.5m	Same as Alt 1, but with one additional mitigation project of $19 to 23 m. Total costs: 117.4 to 147.9 m									
PUBLIC FACILITIES & UTILITIES											
Fire Protection	CCFD #5 response time would increase (& currently do not meet LOS)	CCFDs #3, #5, and #11 affected; new training facilities needed, $2 million (CCFD #11) and $350,000 (CCFD #3)	Growth impacts associated with specific fire districts for each expansion area. Specific impacts if different than Alternative 2would be addressed in FEIS.								
Police Protection	Additional staff & vehicles needed; increased response times likely due to traffic congestion. Additional sworn officers needed: 457	Additional staff and facilities for County Sheriff; new county jail est. cost $90-100 million; possible increased response times Additional sworn officers needed: 535 (79 more than Alternative 1). Alternative 3: one additional sworn officers above those in Alternative 2.									
Public Schools	New facilities: 16 elementary, 6 middle, 2 high, 85 portables Costs: $594 million	New facilities: 23 elementary, 10 middle, 3 high, 83 portables Costs: $880 million	Depends on subareas chosen, location of boundary and relative dispersal of residential areas, but more than under Alternatives 1 and 2.								
Parks and Recreational Facilities	Need for new park and recreation facilities for population growth; most efficient use of existing facilities	Need for new park and recreation facilities for population growth; no park land allocated to low-density residential expansion areas; Vancouver-Clark and all cities would face increased demand									
Libraries	More efficient use of existing facilities; New library facilities needed for growth	New library facilities needed for projected growth									
General government	Demand mostly driven by overall projected growth, not location of growth. No new office space for Clark County needed for next 10 years. La Center expects to construct a new city hall. Vancouver may need additional facilities over next years. Battle Ground expects to need additional space for projected growth. Camas expects to remodel city hall. Washougal may have to expand city hall to provide facilities										
Solid waste	Facilities have capacity to handle waste stream for projected population beyond the 20-year plan period.										
Public water supplies: Additional water demand at capacity build-out Cost to build facilities to meet demand	Some additional transmission lines and water capacity (wells) may be required due to increased densities. Demand of 17.5 million gallons per day.	6.67 million gallons per day more than Alternative 1(demand based on new UGA capacity growth only)	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.								
Sewer	No expansion beyond existing sewer plans. Some additional pipes and capacity may be required due to increased densities. Demand of 15.6 million gallons per day.	5.79 million gallons per day more than Alternative 1 (demand based on new UGA capacity)	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.								
Electricity	Electrical service is entirely a "pay as you go" service. Electrical system upgrades are paid for by new development directly (in the form of system connection fees) and by utility rates paid by Clark Public Utilities (CPU) customers. Rates are adjusted to reflect changing costs of purchasing or generating power. CPU expects to be able to expand the electrical system to serve development for either alternative. Availability of electricity is not expected to be a limiting factor for new development.										

	Alternative 3 Subareas									
	Vancouver							Washougal		
	V1	V2	V3	V4	V5	V6	V7	W1	W2	W3
TRANSPORTATION	Potential needed road system constrained; significantly impact I-5/ Salmon Creek interchange	179th corridor could have failing level of service	Residential development likely to cause congestion and delays at I-5/179th St interchange even after planned improvements	Urban development would increase traffic on Salmon Creek Ave., 50th Ave and 72nd Ave; improvements constrained by environmental factors	Extension of NE 94th St north of NE 119th needed	Residential land would add traffic to NE 99th St, NE 172 Ave, and Ward Rd; impacts not significant if 172nd and Ward Rd improved as planned	Road network limited in this area; traffic impacts to Fourth Plain, SR 500 and NE 162nd Ave	Development west of Washougal river would add traffic to Woodburn and Washougal rds; primary access to east of river is via 32nd St/Stiles/34th St	Access to industrial portion would be via local streets 49th & J sts. Industrial area on south side of 20th St would have poor accessibility	No public street access to single parcel
Vehicle hours of delay [Not calculated for Subareas]										
Lane miles at LOS E/F [Not calculated for Subareas]										
Total project mitigation costs to maintain LOS D [Not calculated for Subareas]										
PUBLIC FACILITIES & UTILITIES										
Fire Protection	Increasing call volume likely an impact and would require additional resources, including a new station with fire and EMS equipment; service in new UGAs would come at the expense of a reduced LOS overall in east county							No additional facilities would be needed; CFP schedule includes construction of a new station and purchase of a new pumper in 2000 and replacement of another in 2011		
Police Protection	Additional staff and facilities for County Sheriff; new county jail est. cost $90-100 million; possible increased response times									
Public Schools	Depends on subareas chosen, location of boundary and relative dispersal of residential areas..									
Parks and Recreational Facilities	Need for new park and recreation facilities for population growth; no park land allocated to low-density residential expansion areas; Vancouver-Clark and all cities would face increased demand									
Libraries	New library facilities needed for projected growth									
General government	Demand mostly driven by overall projected growth, not location of growth. No new office space for Clark County needed for next 10 years. Vancouver may need additional facilities over next years. Battle Ground expects to need additional space for projected growth. Camas expects to remodel city hall. Washougal may have to expand city hall to provide facilities									
Solid waste	Facilities have capacity to handle waste stream for projected population beyond the 20-year plan period.									
Sewer: Additional capacity at build-out Cost to upgrade facilities	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.									
Public water supplies: Additional water demand at capacity build-out Cost to build facilities to meet demand	Alternative 3 options are assumed to result in a similar land use profile as Alternative 2. Therefore, demand would be similar. Network extensions (main lines, etc.) would be different and location and cost would depend upon the option chosen.									
Electricity	Electrical service is entirely a "pay as you go" service. Electrical system upgrades are paid for by new development directly (in the form of system connection fees) and by utility rates paid by CPU customers. Rates are adjusted to reflect changing costs of purchasing or generating power. CPU expects to be able to expand the electrical system to serve development for either alternative. Availability of electricity is not expected to be a limiting factor for new development.									

Table 2. *Summary of Mitigation*

Element	Mitigation Measures
Soils	Comprehensive plan policies and ordinances of Clark County and the cities protect resource land soils and restrict development where there are soil limitations.
Geology and Topography	Comprehensive plans of Clark County and the cities have policies for regulating development within geologically hazardous areas, which are implemented through local geological hazard ordinances.
Climate	Climate change is indirectly addressed and mitigated through federal and state air quality. Choosing an alternative that converts the least amount of undeveloped vegetated areas to impervious surfaces and reduces vehicle emissions through more efficient development are available forms of mitigation to avoid impacts to climate.
Air Quality	Protection of air quality occurs through federal and state regulations on automobiles, fireplaces, and wood stoves. All of the comprehensive plans recognize the importance of maintaining good air quality. Some have policies in their Transportation, Economic Development, and/or Environmental Element to mitigate impacts to air quality from vehicle and industrial emissions.
Surface Water	Comprehensive plan policies and development regulations provide for the protection of surface water quality throughout the county. Generally, mitigation consists of the identification and protection of critical areas and floodplains through local ordinances, protection of shorelines through Shoreline Master Programs, and through stormwater management and erosion control ordinances.
Groundwater and Aquifer Recharge Areas	As required by the GMA, the county and each city have identified critical environmental areas, including critical aquifer recharge areas. Protection of groundwater resources is addressed in critical areas ordinances (CAOs) that regulate development within recharge areas. The County regulates septic systems through its public health department.
Fish and Wildlife Habitat	The protection of fish and wildlife habitat conservation areas is addressed in comprehensive plan policies and implemented through local ordinances. The county and each city have identified critical environmental areas, which include fish and wildlife habitat conservation areas. CAOs, stormwater management programs and regulations, erosion control regulations, and tree protection ordinances are the mechanisms for mitigating adverse impacts to these areas.
Sensitive, Threatened, and Endangered (STE) Species	Mitigation of impacts to STE species is the same as for fish and wildlife habitat, above. All local jurisdictions have updated or are in the process of updating their CAOs, in part to provide greater protection for ESA-listed salmon and steelhead.
Migratory Species/Migration Routes	Mitigation for impacts to migratory species and habitat is the same as for fish and wildlife habitat, above.
Wetlands	The protection of wetlands is accomplished primarily by federal Clean Water Act, Section 404 regulations. State regulations that provide for the mitigation of impacts to wetlands include the Shoreline Management Act, Hydraulic Project Approval, State Environmental Policy Act, and the Floodplain Management Program. The county and the cities have adopted wetland protection ordinances, incorporated into their CAOs.
Renewable and Non-Renewable Energy Sources	The primary energy conservation measure available to local jurisdictions is to adopt a compact urban form that supports alternative, energy efficient transportation. The Battle Ground, Camas, and Vancouver comprehensive plans directly address energy conservation.
Scenic Resources	Clark County has designated 2 scenic routes and implements the provisions of the Columbia River Gorge National Scenic Area Act in its code requirements. Battle Ground has adopted interim policies to protect and promote significant views. Camas' municipal code also allows for the protection of scenic resources. Other local codes do not directly address scenic resources.
Noise	Federal and state regulations that limit noise exposure in different classes of land use provide for some mitigation of noise impacts. Noise impacts are also considered in SEPA environmental review. Vancouver proposes to adopt a modification of the state noise ordinance.
Land Use, Population, and Housing	Mitigation for the lack of sufficient land for the 20-year growth projection is to change growth or redevelopment assumptions or upzone land within existing UGAs.
Rural Lands	Clark County's comprehensive plan has policies that protect rural lands. Development on rural lands is also regulated by the county's zoning code, which establishes rural districts and permitted uses.

Element	Mitigation Measures
Resource Lands	Clark County's comprehensive plan policies protect resource lands from incompatible uses and from conversion to urban land. The zoning code regulates the intensity and nature of development that can occur on and adjacent to resource lands. City comprehensive plans contain policies that direct development away from productive forest and farm land.
Historic and Cultural Resources	Clark County and the cities have policies and/or ordinances that require these jurisdictions to identify and protect historic and cultural resources.
Transportation	Both Alternative 1 and Alternative 2 would require significant transportation improvements to reduce congestion and achieve a system-wide level-of-service D. Other mitigation could consist of : Seeking out local option transportation funding and increased funding through the state legislature or referenda. Lowering the LOS standards on corridors where appropriate funding levels are not available or where multimodal transportation use is to be encouraged. Reducing the amount of UGA expansion or the intensity of growth in outlying urban growth areas, or at a minimum, developing a mechanism to delay growth in certain areas until funding is available. Amending the County's comprehensive plan to allow rural major collectors to become multi-lane, non-state highways on specific routes that connect urban areas. Implementing a regional traffic impact fee structure whereby rural and outlying urban area development contributes toward the cost of rural corridor capacity improvements.
Emergency Services and Fire Protection	Battle Ground would require a new training facility. Increasing call volume, particularly in east county, would require additional resources for CCFD No. 5 to serve the Vancouver UGA, including a new station with fire and EMS equipment.
Police Protection	New facilities would be needed to mitigate the impacts of projected demands for services in most new UGAs. A new jail facility would be necessary within the next 6 years for the Clark County Sheriff. A new La Center facility could be required to serve development concentrated at the I-5 Junction; a new city hall would house expanded police department in the next 5-10 years. Ridgefield anticipates a need for a new public safety facility (combining fire and police protection) to serve proposed development in the Ridgefield Junction area. Funding this mitigation would be difficult. An additional mitigation measure would be developing a mechanism to delay growth in certain areas until funding is available.
Public Schools	Several new schools in each local jurisdictions have adopted school impact fees on new development. Local comprehensive plan policies address the siting of new school facilities. Balancing land uses within school districts helps to ensure adequate tax base for schools. Battle Ground would need to expand existing school facilities and add at a minimum of 12 new schools and 2 to 13 portlables. Camas would add 2 or 3 new schools and 3 to 4 portables. Evergreen would need at least 9 new schools, and 27 to 32 portables. Green Mountain would add either 4 portables or 1 school. Hockinson would expand its high school and add from 2 to 6 portables, plus 1 elementary school. La Center has plans for 2 new schools and an expanded high school. Ridgefield would add 5 to 7 new schools and 8 portables. Vancouver add 4 to 5 new schools and 24 to 32 portables. Washougal would add 1 to 4 new schools and 2 to 4 portables. An additional mitigation measure would be developing a mechanism to delay growth in certain areas until funding is available.
Parks and Recreation	Clark County and its cities have established policies for the provision of parks and open space to accommodate new development and enhance the quality of life in urban areas. Mitigation in the form of additional parks would be needed to maintain levels of service in Battle Ground, Camas, Ridgefield, Vancouver, .and Washougal. Funding this mitigation would be difficult. An additional mitigation measure would be developing a mechanism to delay growth in certain areas until funding is available.
Libraries	Fort Vancouver Regional Library District provides this service. Mitigation measures to meet additional demand for library services consists of upgrading old or establishing new facilities where needed, purchase of materials, and increasing staff and other services. Local jurisdictions can provide mitigation for impacts from growth in form of assistance in locating facilities, assistance with entitlements, and coordination with programs and planning.
General Government	New and expanded facilities for several jurisdictions, as noted in the Summary of Impacts table, would need to be funded to maintain services for the new population.
Solid Waste	No mitigation needed.
Sanitary Sewer	Concurrency requirements extend to sanitary sewer provision. Each jurisdiction has established policies for providing sanitary sewer service concurrent with new development.

Element	Mitigation Measures
Public Water Systems	Concurrency requirements extend to water provision. Each jurisdiction has established policies for the provision of public water concurrent with new development.

Comprehensive Growth Management Plan
Clark County Draft EIS
Alternative #1 ("No Action")

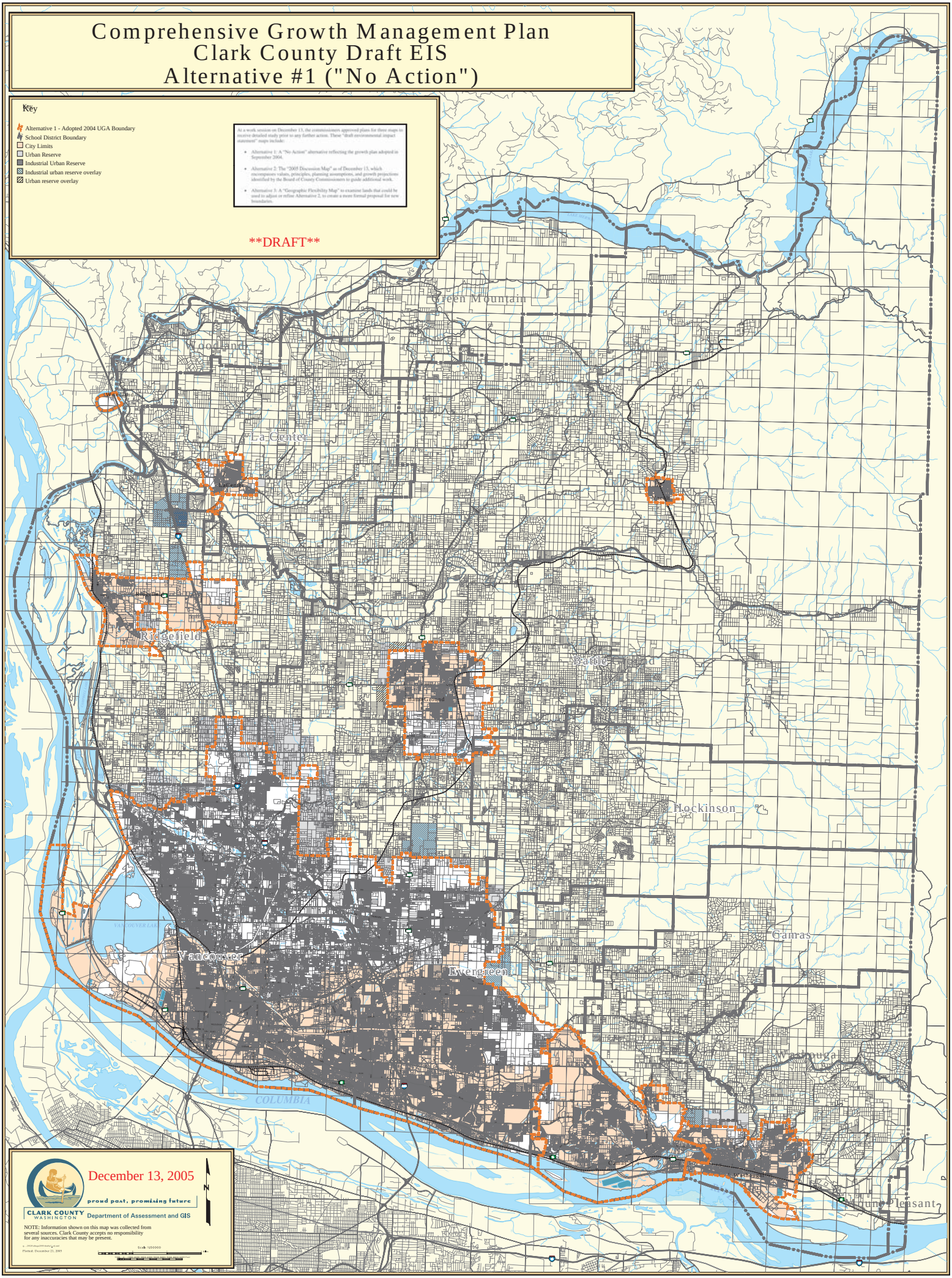
Key

- Alternative 1 - Adopted 2004 UGA Boundary
- School District Boundary
- City Limits
- Urban Reserve
- Industrial Urban Reserve
- Industrial urban reserve overlay
- Urban reserve overlay

As a work session on December 13, the commissioners approved plans for three maps to receive detailed study prior to any further action. These "draft environmental impact statement" maps include:

- Alternative 1: A "No Action" alternative reflecting the growth plan adopted in September 2004.
- Alternative 2: The "2005 Discussion Map" as of December 13, which encompasses values, principles, planning assumptions, and growth projections identified by the Board of County Commissioners to guide additional work.
- Alternative 3: A "Geographic Flexibility Map" to examine lands that could be used to adjust or refine Alternative 2, to create a more formal proposal for new boundaries.

DRAFT



December 13, 2005

proud past, promising future

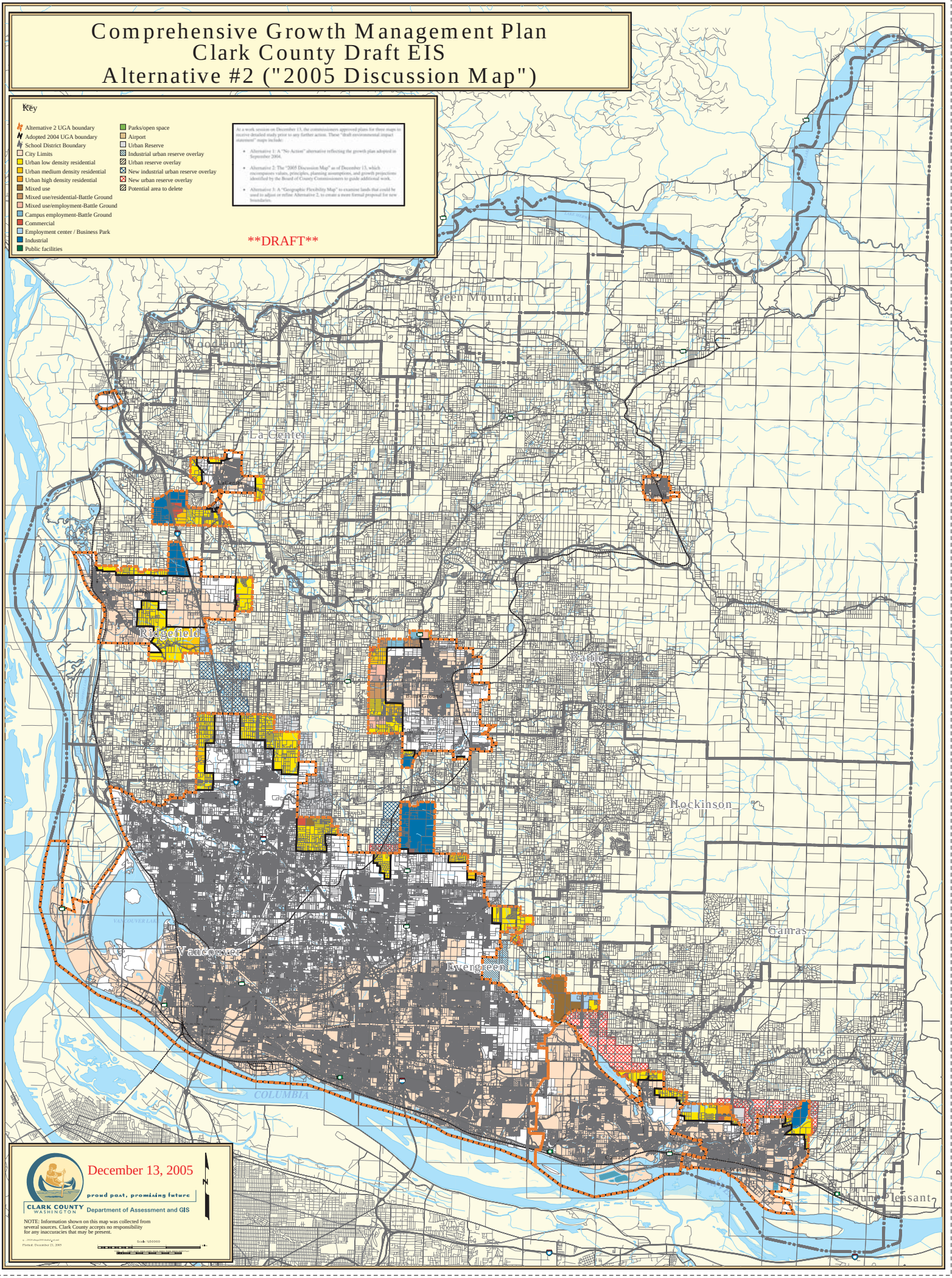
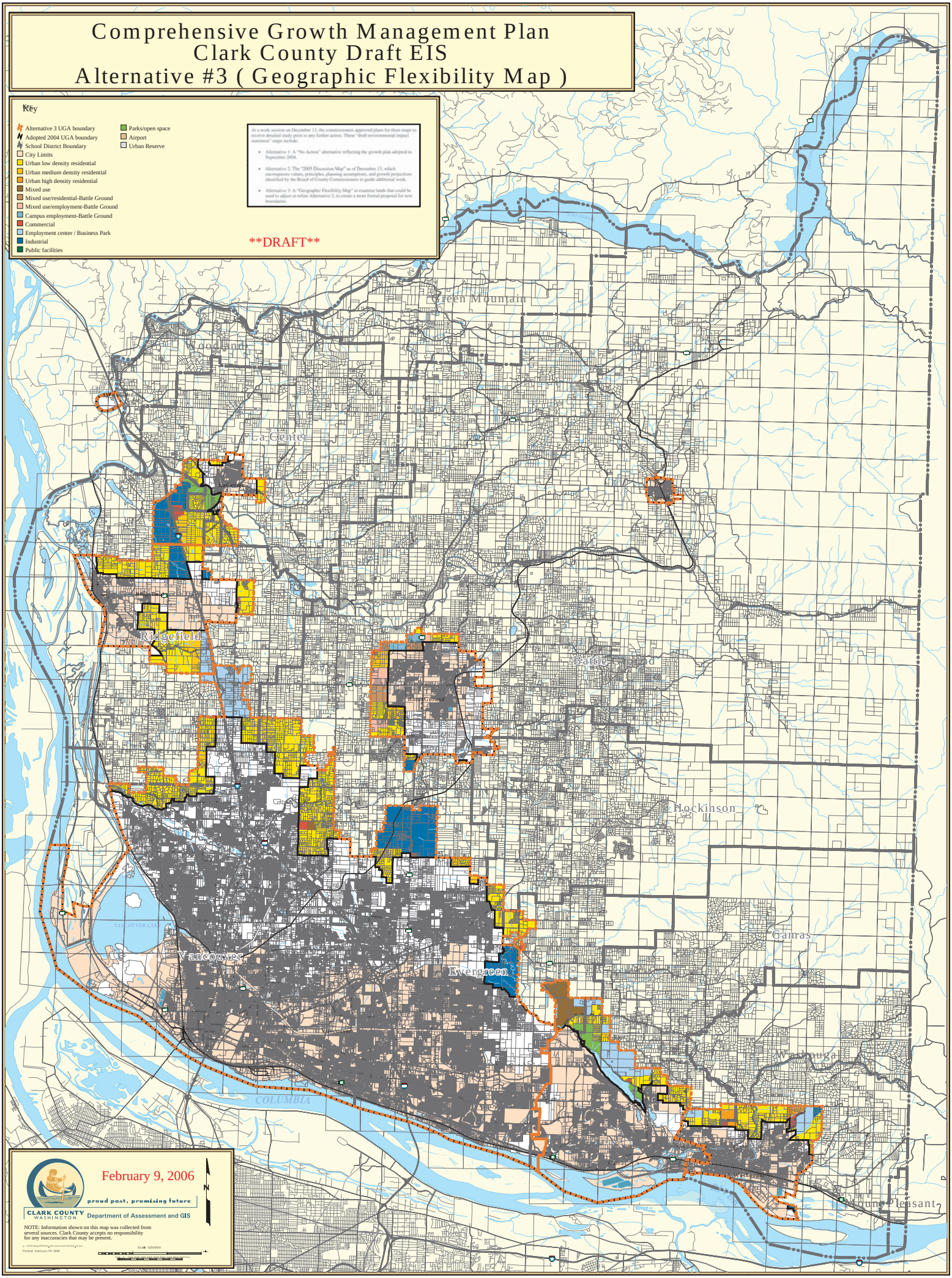
CLARK COUNTY WASHINGTON Department of Assessment and GIS

NOTE: Information shown on this map was collected from several sources. Clark County accepts no responsibility for any inaccuracies that may be present.

Plotted: December 21, 2005

Scale 1:150000

Comprehensive Growth Management Plan
Clark County Draft EIS
Alternative #2 ("2005 Discussion Map")



Comprehensive Growth Management Plan
Clark County Draft EIS
Alternative #3 (Geographic Flexibility Map)