

## GRAHAMS FERRY URBAN RESERVE AREA

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|                              |     |                            |     |
|------------------------------|-----|----------------------------|-----|
| Total Acres                  | 203 | Parcel Acres               | 200 |
| Gross Vacant Buildable Acres | 85  | Net Vacant Buildable Acres | 65  |

### **General Description (see attached map)**

The Grahams Ferry Urban Reserve Area is a block shaped area on the west side of Wilsonville, east of SW Grahams Ferry Road that totals 203 acres in size. The current UGB forms the southern and eastern boundaries of this primarily flat area. The area is served by SW Grahams Ferry Road and SW Tooze Road. The Coffee Lake Wetlands natural area owned by Metro, which is inside the UGB, is east of the reserve area.

### **Parcelization, Building Values, Development Pattern (see attached aerial photo)**

This small urban reserve area contains 24 parcels that range from 2,200 square feet to 60 acres in size. Nineteen of the 24 parcels are less than ten acres in size and the five largest parcels account for 78% of the land in the reserve area. The area includes both rural residential development and limited agricultural activity, mostly in pasture land. Overall, 16 of the 24 parcels have improvements, with a median value of \$183,755. Available data does not suggest the existence of power lines or public easements through this area. There is a large block of Metro-owned open space that borders the reserve area to the east effectively eliminating any connections to the industrial uses to the east within the UGB.

## **GOAL 14 LOCATIONAL FACTORS**

### **Efficient accommodation of identified land needs**

The reserve area is flat with two small locations of slopes greater than 10% that would not impact future development. The five largest parcels, which total 155 acres, are adjacent to each other forming a considerable block of land. However, there are some significant natural resources located on these parcels that will direct development to the western portion of the reserve area, away from the existing employment center of Wilsonville. Therefore this area is able to accommodate a residential land need.

### **Orderly and economic provision of public facilities and services**

#### **Sanitary Sewer Services**

### Capacity of existing facilities to serve areas already inside the UGB

The wastewater treatment plant was upgraded in 2014 which increased capacity from 2.5 MGD to 4.0 MGD resulting in excess capacity. The City has projects planned for the Memorial Park lift station over the next three years and a 20-year program in place to replace aging concrete pipe. There is capacity to serve areas already in the UGB.

### Capacity of existing facilities to serve areas proposed for addition to the UGB

The wastewater treatment plant can serve a population of 35,000 people. The plant currently serves 24,000 people. The development of the Frog Pond area (existing UGB) will use some capacity, but will not likely trigger any treatment plant upgrades. The City is planning to expand the treatment plant in 2030, however future industrial development in the Basalt and Coffee Creek areas could require capacity upgrades sooner depending on the timing of the industrial development. At this time, it is unknown if the treatment plant will have additional capacities to serve the reserve area.

### Impacts to existing facilities that serve nearby areas already inside the UGB

Based on conceptual level sewer sizing analysis, approximately 1.2 cfs will be added to the existing system. Conceptual sewer layouts indicate that additional flows will utilize the existing gravity trunk line ranging in size from 15-inch (at the upstream connection at Coffee Lake Drive) to 30-inch (at the treatment plant). The capacity of the existing line is not available at this time, and therefore, the extent of required improvements to the existing trunk line and the associated costs are unknown.

### Sanitary Sewer Piping Costs

| Sanitary sewer piping costs  | Cost (in millions) |
|------------------------------|--------------------|
| Less than 12" pipe (gravity) | \$1.77             |
| <b>Total</b>                 | <b>\$1.77</b>      |

### Water Distribution Services

#### Capacity of existing facilities to serve areas already inside the UGB

Wilsonville owns and maintains the Willamette River Water Treatment Plant, which is capable of processing 15 MGD. A planned improvement will bring the treatment plant capacity to 20 MGD in order to serve the existing UGB through the year 2036. Current storage capacity is at 11 MG and the City has funded a project to provide additional storage to serve proposed development within the existing UGB. At present, existing pump stations and pipe networks are adequate to serve the area within the existing UGB.

### Capacity of existing facilities to serve areas proposed for addition to the UGB

The City has ample water rights for the long term, so water supply is not an issue. The expected additional 10 MG expansion of the treatment plant in 2035 should provide capacity for the reserve area. Existing storage tanks do not have capacity to serve development outside of the existing UGB.

### Impacts to existing facilities that serve nearby areas already inside the UGB

The City feels confident that it will have water capacity and storage to serve the reserve area. Numerous connection points exist at the edge of the reserve area and are assumed to be of adequate size. Transmission lines within the reserve area are expected to be built as development occurs.

#### Water Costs

| Water piping/storage/pumping costs | Cost (in millions) |
|------------------------------------|--------------------|
| 12" and smaller                    | \$0.87             |
| 18" and larger                     | \$1.44             |
| Storage/pumping                    | \$0.98             |
| <b>Total</b>                       | <b>\$3.29</b>      |

#### Storm Sewer Services

### Capacity of existing facilities to serve areas already inside the UGB

There is no indication of capacity issues with existing stormwater facilities that serve the land inside the UGB.

### Capacity of existing facilities to serve areas proposed for addition to the UGB

Stormwater will be conveyed, treated, and disposed of within the reserve area therefore, it is not anticipated that existing facilities would be utilized.

### Impacts to existing facilities that serve nearby areas already inside the UGB

Stormwater conveyance, treatment, and discharge are anticipated to occur within the reserve area; therefore no impacts to existing facilities are anticipated.

#### Storm sewer conveyance and water quality/detention costs for roadways

| Conveyance & water quality/detention costs | Cost (in millions) |
|--------------------------------------------|--------------------|
| Conveyance                                 | \$2.5              |
| Water quality/detention                    | \$2.54             |
| <b>Total</b>                               | <b>\$5.04</b>      |

## **Transportation Services**

Capacity of existing facilities to serve areas already inside the UGB

**Roadway:** All roadways in Wilsonville have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak. I-5 south of SW Wilsonville Road to across the Willamette River is classified as a high injury corridor for automobiles and SW Parkway Ave from Printer Parkway to SW Town Center Loop E is classified as a high injury corridor for pedestrians.

**Transit:** South Metro Area Regional Transit (SMART) provides full transit services to the City of Wilsonville through seven bus lines, Dial-a-Ride and medical transport services. The vast majority of the city's developed areas are within  $\frac{1}{4}$ -mile of a transit stop. TriMet's Westside Express Service (WES) Commuter Rail originates its route in Wilsonville, servicing four other stations on its way to Beaverton.

**Bike:** Wilsonville has a well defined bike network of dedicated bike lanes (19 miles) and established bikeways (4.5 miles) that connects neighborhoods, schools, parks, community centers, business districts and natural resource areas.

**Pedestrian:** Wilsonville has a fairly well defined pedestrian network in its residential neighborhoods with less pedestrian amenities in the industrial and employment areas. Interstate 5 provides a barrier for east-west pedestrian connections.

Capacity of existing facilities to serve areas proposed for addition to the UGB

**Roadway:** All roadways that serve the urban reserve area have an acceptable volume/capacity ratio (<0.9) for the 2015 pm peak.

**Transit:** Currently there is no regular SMART service to the reserve area. SMART's Route 7 - Villebois, the closest route that is over one-half mile from the reserve area, provides limited connecting service to the SMART Central Station for WES trains. The Route 7 Villebois Shopper Shuttle provides connection to the Town Center. The WES Wilsonville station is a little over one mile away.

**Bike:** The majority of SW Tooze Road and SW Boeckman Road adjacent to the reserve area have a dedicated bike lane that extends east across I-5 and south to Villebois and other bike facilities. Significant natural areas border the east side of the reserve area, thereby limiting bike access to SW Boeckman Road.

**Pedestrian:** A majority of SW Tooze Road and SW Boeckman Road have a sidewalk on one side and sidewalks are present in all of the developed portions of Villebois. Significant natural areas border the east side of the reserve area, thereby limiting pedestrian access to SW Boeckman Road. Access to the nearby Ice Age Tonquin Trail is in Villebois, which extends south through Graham Oaks Nature Park to the Willamette River.

Impacts to existing facilities that serve nearby areas already inside the UGB

**Roadway:** SW Tooze Road/SW Boeckman Road would see additional traffic as it provides access to employment areas as well as to the east side of Wilsonville. SW Kinsman Road would see additional traffic as it provides a connection to I-5 via SW Wilsonville Road.

**Transit:** SMART transit service would be expected to see additional use, see below for details.

**Bike:** Bike facility improvements on SW Tooze Road as part of the upgrade of the road to urban standards will provide appropriate bike access to SW Boeckman Road and Villebois which would see additional use. Significant natural areas border the east side of the reserve area, thereby limiting direct bike access to SW Boeckman Road.

**Pedestrian:** Pedestrian facility improvements on SW Tooze Road as part of the upgrade of the road to urban standards will provide appropriate pedestrian access to SW Boeckman Road and Villebois. This would lead to additional use of the Ice Age Tonquin Trail. Significant natural areas border the east side of the reserve area, thereby limiting direct pedestrian access to SW Boeckman Road.

#### Need for new transportation facilities costs (see attached transportation map)

The portion of SW Grahams Ferry Road that borders the reserve area will need to be improved to urban arterial standards. A new collector is needed north of SW 110<sup>th</sup> Ave through the middle of the reserve area to SW Grahams Ferry Road.

| Facility Class |                   |                    |
|----------------|-------------------|--------------------|
| Arterials      | Type              | Cost (in millions) |
|                | Existing/Improved | \$22.36            |
| Collectors     | Type              | Cost (in millions) |
|                | New               | \$15.11            |
|                | <b>Total</b>      | <b>\$37.47</b>     |

#### Provision of public transit service

South Metro Area Regional Transit (SMART) evaluated the reserve area for providing transit service. SMART could provide services to the reserve area although there is no guarantee of service. Actual service depends on the level of development in the expansion area and in the corridors leading to the reserve area. Service could be provided at 60 minute headways weekday with one additional bus at a capital cost of \$650,000 (recurs every 14-15 years). Bus capital costs reflect electric vehicle costs as SMART plans to provide services with a zero emission fleet. Annual service cost is \$140,000 and grows 3% per year.

Prior to land being included in the UGB a more detailed concept plan, consistent with the requirements of Metro's Urban Growth Management Functional Plan Title 11, is required. This concept plan process will develop more refined public facility and service needs and cost estimates.

## **Comparative environmental, energy, economic and social consequences (ESEE analysis)**

### **Environmental**

Coffee Lake Creek flows south along the northern edge of the reserve area and then continues south through the eastern portion of the area for approximately 1,260 feet. A 44 acre portion of a much larger wetland system identified on the local Wilsonville inventory is located west of the portion of Coffee Lake Creek that flows through the area. The wetland appears to contain some irrigation ponds and an irrigation channel. This wetland extends south and east to connect with the wetland that is located on the Metro owned open space within the UGB to the east, essentially surrounding the very eastern portion of the reserve area. As you would expect a substantial amount of riparian habitat is identified along the wetland and stream, essentially encompassing the entire east side of the reserve area. Given that all of the natural resources are located in the eastern portion of the reserve area, urbanization of the western section could occur with no impacts to the stream and wetland areas. Overall urbanization of the area could occur with minimal impacts to the stream corridor and the wetland area if future development is focused away from the wetland/stream complex.

### **Energy, Economic & Social**

It is expected that urbanization of the reserve area will result in new housing replacing the existing rural residences. This would result in a loss of sense of place and rural lifestyle for the few residents of the area. The significant natural resources in the area decreases the overall amount of development that can occur, while at the same time providing a significant amount of land that will stay in a natural state, thus potentially reducing the social impacts of future urbanization on the existing residents of the area. SW Tooze Road and SW Boeckman Road provide an easy connection to employment areas in the City of Wilsonville which could help reduce the increase in VMT as a result from urbanization of the area. However, given the modest amount of development that would occur, the increase in traffic would not be great and would not have significant energy consequences. In addition, the future build out of Villebois to the south will provide additional commercial development and provide the opportunity for other modes of transportation besides the automobile that could reduce some local trips. The agricultural activity within the reserve area is minimal. The loss of the economic impact from these agricultural uses would not be considerable and the potential economic impact of residential development, even though it is not significant will outweigh this loss. Overall this analysis area has low economic, social and energy consequences from urbanization.

### **Compatibility of proposed urban uses with nearby agricultural and forest activities occurring on farm and forest land outside the UGB (see attached resource land map)**

There is a 160-acre block of exclusive farm use (EFU) zoned land directly adjacent to the north edge of the reserve area that extends west of SW Grahams Ferry Road. The resource land to the west of SW Grahams Ferry Road is forested with no agricultural activities and the resource land to the north contains some minimal agricultural activities and also forested land. The vast majority of this farmland is open space owned by Metro. Due to the very limited nature of the agricultural activities

occurring on the adjacent EFU zoned land, the proposed urban uses would be compatible with nearby agricultural activities occurring on farm land outside the UGB.



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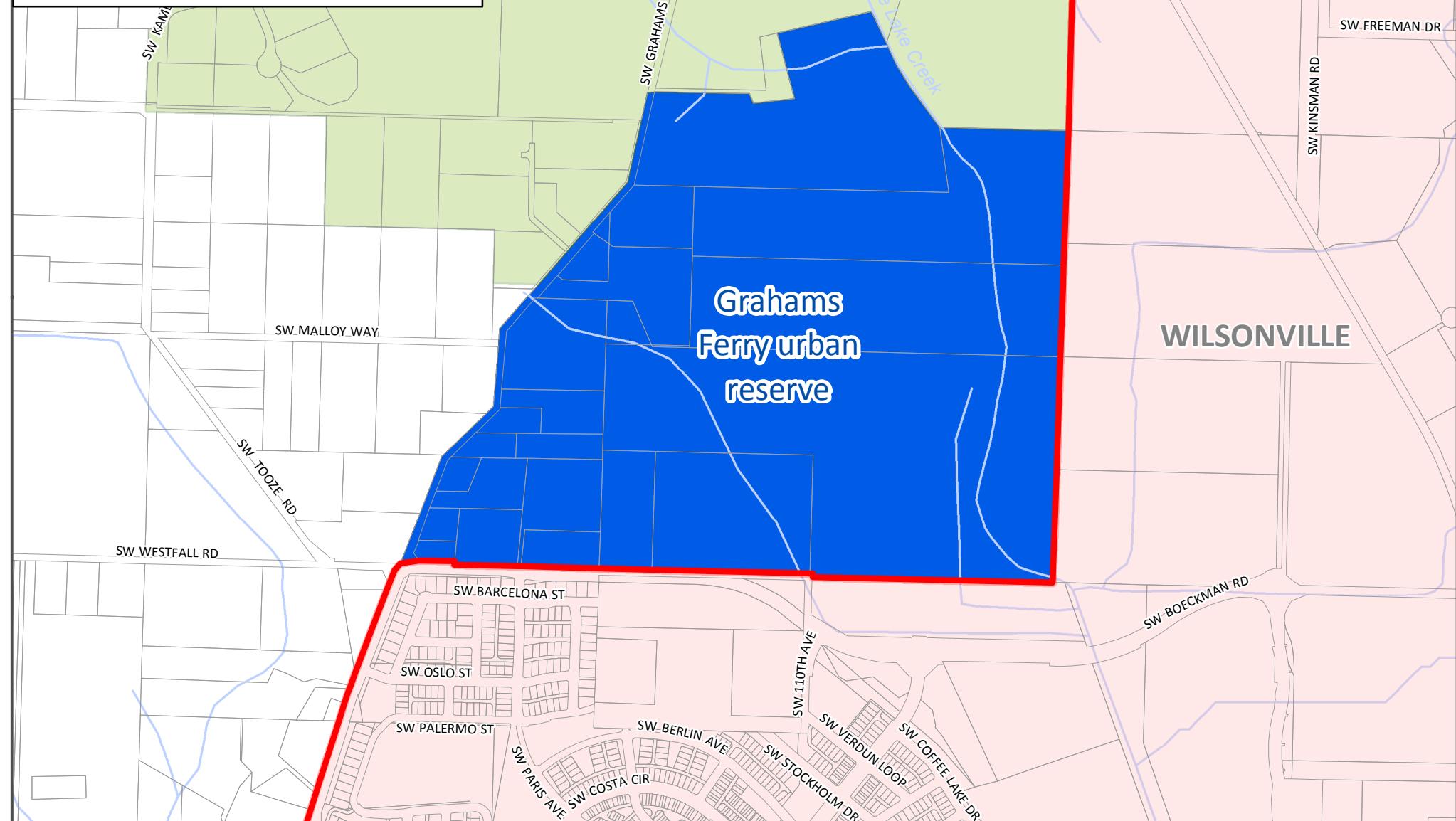
## Preliminary Urban Growth Boundary Alternatives Analysis *Grahams Ferry*

Inside the  
Urban Growth Boundary

Rural reserve

Stream routes

Other urban reserve

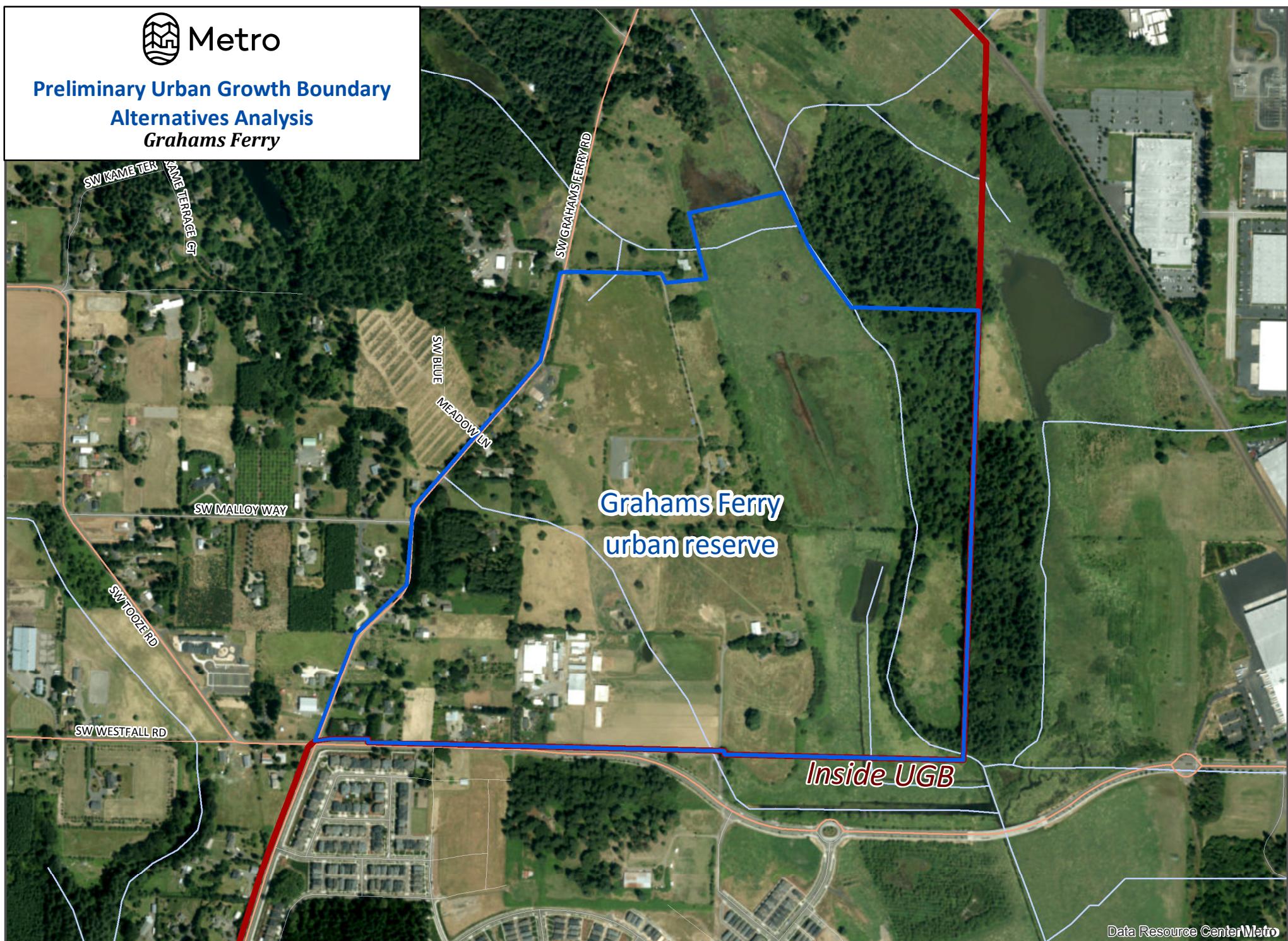


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Preliminary Urban Growth Boundary  
Alternatives Analysis  
*Grahams Ferry*



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Data Resource Center Metro



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## Preliminary Urban Growth Boundary Transportation Analysis *Grahams Ferry*

Inside the  
Urban Growth Boundary

Rural reserve  
Other urban reserve

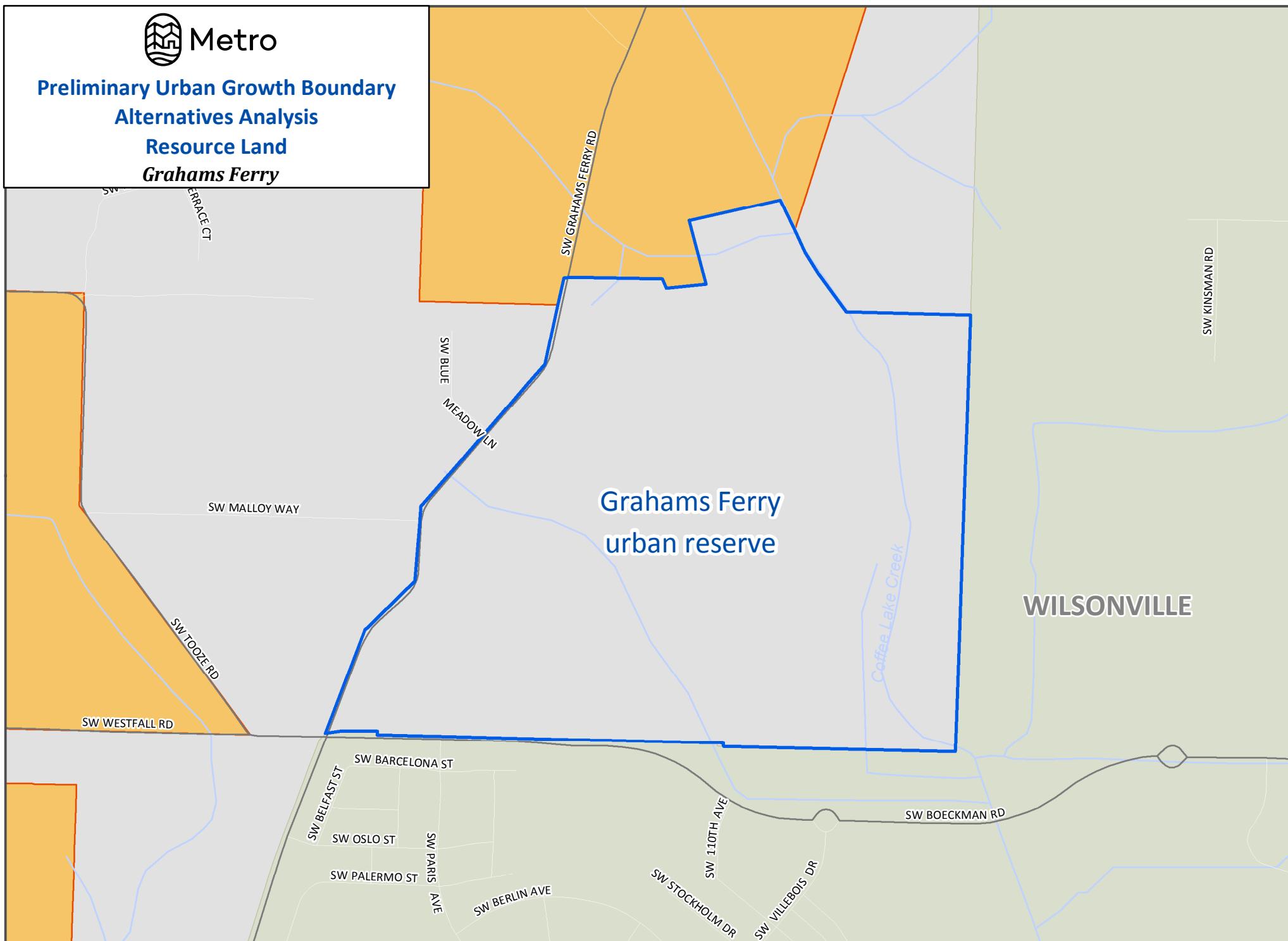
Stream routes



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Preliminary Urban Growth Boundary  
Alternatives Analysis  
Resource Land  
*Grahams Ferry*



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