

**APPENDIX G**  
**- ENVIRONMENTAL TECH MEMO**





## Technical Memo

**To** City of Tumwater  
**From:** David Rowland, PE  
**Date:** September 13, 2022  
**Project:** 0625.29 – Old Highway 99 Corridor Study  
**Subject** Environmental Considerations

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### Introduction

Our Environmental assessment follows the premise laid out in Part 4 – Environmental Considerations from the NEPA CE Categorical Exclusion Documentation Form. Considerations include thirteen elements to identify impacts and the plan for mitigation when needed. Each of these elements are evaluated at a preliminary level to identify potential mitigation in the future and to inform where potential considerations will impact design.

#### 1. Air Quality

Improvements to Old Highway 99 will increase capacity by adding additional lanes for the Old Highway 99 Corridor and the introduction of roundabouts at multiple intersections. Therefore, each of the phases of the project will be evaluated for the air quality impacts. Currently, no pollutants pose persistent air quality problems subject to the Clean Air Act currently. And while air quality mitigation is not anticipated, each phase of the project will have to be further evaluated prior to completion of design.

#### 2. Critical Areas

Critical Areas for Old Highway 99 corridor improvements from 73<sup>rd</sup> avenue to 93<sup>rd</sup> avenue were evaluated for this study to determine if there were any potential mitigation needs moving forward.

##### *Sole Source Aquifers*

Looking at a map of Sole Source Aquifers from ESA ArcGIS Maps, it was determined that this project falls outside any sole source aquifers. No mitigation anticipated.

### *Species Habitat*

Species that are impacted from the ESA list are Mazama Pocket Gopher and Streaked Horned Lark designated critical habitats or suitable habitats. Further investigation to how this project impacts these species will have to be evaluated for each phase of the project.

See **Appendix A** for Mazama Pocket Gopher Map.

### *Wetlands*

No wetlands are present for the Old Highway 99 improvements and do not need to be considered for mitigation.

## 3. Cultural Resources/Historic Structures

For the Study, Cultural Resources and Historic Structures were considered. Two sites were identified as areas to be considered for the Old Highway 99 improvements.

### *Historic Oak Tree*

Located adjacent to Old Highway 99 (formerly Pacific Highway), the garry oak tree stands between 70 and 100 feet high and is 16 feet in circumference. The Oregon white oak (*Quercus garryana*) or garry oak is the only native oak of Washington.

The tree is significant as a specimen tree of the garry oak species. This tree will be protected.

### *George Washington Bush Interpretive Site*

The George Washington Bush Interpretive Site is a four-sided kiosk designed to be reminiscent of the gable of the W. O. Bush home. On the four sides are interpretative panels about the legacy of the Bush family. Two of the panels are replicas of the Jacob Lawrence George Bush Series of paintings.

This marker commemorates the legacy of the George and Isabella and William O and Mandana Bush Families. This land is part of the original Bush donation claim. The Bush family came with the first permanent American settlement to Tumwater in 1845, settling just east of this marker along the Deschutes River.

Property take will be necessary for this location due to its proximity to the proposed roundabout. There is opportunity to incorporate the interpretive site into the design of the roundabout to provide more accessibility to the site. Currently, the interpretive site is hard to access for pedestrians and bicycles because there are none accommodating facilities passing this site. Further evaluation of incorporating the design with the interpretive site will be required.

See **Appendix B** – Historic Properties Report for additional information regarding these sites.

## 4. Floodplains and Floodways

Evaluation of the 100-year flood revealed that improvements from 73<sup>rd</sup> Avenue to 93<sup>rd</sup> Avenue do not fall within the 100-year floodplain area. No mitigation anticipated. Refer to **Appendix C** – Flood Plan Exhibits for reference.

## 5. Hazardous and Problem Waste

### *Excavation Below Existing Ground*

Roadway improvements will require the excavation of existing ground. Excavation could expose an abandoned underground storage tanks or a forgotten dump site. Known locations are near the roundabout intersections where we have stormwater bioretention facilities planned. Also, in any locations where catch basins and storm pipes are placed, this will require excavation of existing ground. In addition, illumination installation will require excavation for conduit and junction box installation. The City should consider where chemicals may have been historically used prior to enactment of modern environmental laws.

### *Groundwater*

Thurston County's Geodata map was consulted to verify that no groundwater hazards are located on the project site. No mitigation anticipated. See **Appendix D** for High Ground Water Map.

### *Property Impacts*

Property will have to be acquired as a part of the project to provide the amount of right of way necessary for the project. Property acquired and relocated will have to be evaluated in light of Environmental Justice as laid out in section 13.

### *Site Location with Respect to Development*

None of the future improvements are in undeveloped areas including building, parking, storage areas, or agriculture.

### *Identified Sites by Department of Ecology Near Project*

Upon investigation of the Department of Ecology data base, it was determined that there are three sites that fall within a ½ mile radius of the project that have a history of hazardous and problem waste. Below locations that have a history of hazardous and problem waste:

- Deschutes Animal Clinic Inc
- Pearson Air Inc.
- Gower Flying Service

All these sites have been marked complete for cleanup. There are no current hazardous and problem waste sites that border the project site limits.

## *Site Reconnaissance*

At the intersection of 79<sup>th</sup> Avenue and Old Highway 99 there will be property impacted that is currently operates a gas station. This property potentially has hazardous or problem waste and will require a Phase 1 Environmental Site Assessment.

Also, the project may require the acquiring of property from a Pick-n-Pull site. This site also has potential for hazardous and problem waste and may require a Phase 1 Environmental Site Assessment.

## 6. Noise

Improvements to Old Highway 99 will increase capacity by adding additional lanes for the Old Highway 99 Corridor and the introduction of roundabouts at multiple intersections. Therefore, each of the phases of the project will be evaluated for the noise impacts and whether the widening moves traffic closer to noise receptors.

## 7. 4(f)/6(f) Resources

This project impacts part of the G.W. Bush Historic Site. Part of the anticipated roundabout will impact some of this historic site. And evaluation of how much impact and mitigation will need to take place will be created for this site.

Additionally, this project passes close to an historical oak tree discussed in section 6.1.3.1.

## 8. Agricultural Lands

Project limits will not extend into Agricultural Lands. No mitigation anticipated.

## 9. Rivers, Streams, or Tidal Waters

At the end of the project near Old Highway 99 and 93<sup>rd</sup> Avenue, the Deschutes River falls within 300 feet of the existing roadway. We do not anticipate that the Old Highway 99 future improvements will impact the nearby river. Buffer impacts will be evaluated during the design phase of that project.

See **Appendix F** for Rivers and Streams Exhibit.

## 10. Tribal Lands

Assessing the tribal lands in the area, the Old Highway 99 corridor improvements from 73<sup>rd</sup> Avenue to 93<sup>rd</sup> Avenue does not fall within tribal lands. See **Appendix G** for Tribal Lands Map.

## 11. Water Quality/Stormwater

Stormwater for the corridor improvements will be treated and follow guidelines provided by the *2022 Drainage Design and Erosion Control Manual for Tumwater*. A stormwater evaluation was conducted for the Old Highway 99 Corridor Study.

## 12. Previous Environmental Commitments

There are no previous environmental commitments on or bordering the Old Highway 99 improvement project site.

## 13. Environmental Justice

The study used the EJSCREEN map provided by the Environmental Protection Agency (EPA) to determine the level of limited English proficiency, the population by race, and the number of low-income households. Further evaluation will have to be conducted as a part of each phase for meet the Environmental Justice requirements.

### *1.1.1.1 Limited English Proficiency*

Information on race/ethnicity is useful in identifying populations with limited ability to understand English and the need for translation services. The U.S. Department of Justice recommends that agencies consider providing language translation services if an ethnic group with a primary language other than English comprises 5 percent, or 1,000 persons or more, of an area. For example, if 5 percent or more of an area’s population is Hispanic, there is a strong possibility that individuals may be limited in their understanding of English, thereby limiting their ability to participate in the project decision-making process. In this case, translation and interpreter services should be provided.

The ACS Summary Report identifies that the population of the Environmental Justice Area has 1 percent of the population that “speak English less than well.” According to the U.S. Department of Justice recommendations, translation services are not required. However, if during the proposal or project process a person is identified as a person who “speaks English less than well,” interpretation services will be provided.

### *1.1.1.2 Population by Race*

A determination of the presence of an EJ population was conducted using the EJSCREEN ACS Summary Report and the EJSCREEN Census 2015-2019 Summary Report. Table 6.1 summarizes the 2015-2019 census data for the area within ½ mile each side of centerline of the project.

**Table 6.1 Population by Race Along Old Highway 99**

<b>Minority</b>	<b>Number of Persons</b>	<b>Percentage</b>
White Alone	1567	80%
Hispanic or Latino (of any race)	170	9%
American Indian and Alaskan Native Alone or in Combination	7	0%
Black or African American Alone or in Combination	64	3%
Asian Alone or in Combination	37	2%
Native Hawaiian and Other Pacific Islander Alone or in Combination	13	1%
Some Other Race Alone or in Combination	104	5%

<b>TOTAL POPULATION</b>	<b>1962</b>	<b>100%</b>
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The closest elementary school is East Olympia Elementary School. The school demographic data is shown in Table 2 and does verify the census data, in summary. Because the study area and the school district boundary do not fully overlap, these differences are likely due to a difference in geographical boundaries.

**Table 6.2 Population by Race for East Olympia Elementary**

<b>Minority</b>	<b>Number of Persons</b>	<b>Percentage</b>
White Alone	339	65%
Hispanic or Latino (of any race)	110	21%
American Indian and Alaskan Native Alone or in Combination	1	0%
Black or African American Alone or in Combination	14	3%
Asian Alone or in Combination	18	4%
Native Hawaiian and Other Pacific Islander Alone or in Combination	1	0%
Some Other Race Alone or in Combination	36	7%
<b>TOTAL POPULATION</b>	<b>519</b>	<b>100%</b>

### **1.1.1.3**      *Low Income Households*

Additionally, the study area is made up of 193 low-income households (23 percent), of a total of 848 total households. This is less than Thurston County’s rate of 30 percent of low-income households.

It has not been determined for the property acquisitions and relocations if they will require any EJ mitigation, and evaluation of the property and their owners will need to be conducted on each phase of the project where we have major parcel takes and relocations. For EJSCREEN ACS Summary Reports see **Appendix H**.

## **LIST OF APPENDICES**

Appendix A - Mazama Pocket Gopher Map

Appendix B – Historic Properties Reports

Appendix C – Flood Plain Exhibits

Appendix D – High Groundwater Map

Appendix E – Agricultural Lands

Appendix F – Rivers and Streams

Appendix G – Tribal Lands Map

Appendix H – EJ Screen Reports