LOWER GREEN RIVER CORRIDOR FLOOD HAZARD MANAGEMENT PLAN

Draft Programmatic Environmental Impact Statement

Volume II

Appendix D: Equity and Social Justice

KING COUNTY FLOOD CONTROL DISTRICT

March 2023

KING COUNTY FLOOD CONTROL DISTRICT

Appendix D

Equity and Social Justice

March 2023

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ATTACHMENTS

ACRONYMS AND ABBREVIATIONS

Board	King County Flood Control District Board of Supervisors
CF	Conservation Futures
cfs	cubic feet per second
CIP	capital improvement plan/program
Corridor	Lower Green River Corridor
Determinants	Determinants of Equity
District	King County Flood Control District
Ecology	Washington State Department of Ecology
EMS	emergency medical services
ESJ	Equity and social justice
FCD Motion	King County Flood Control District Motion
HHD	Howard Hanson Dam
HHS	health and human services
KCPH	King County Public Health
LEHD	Longitudinal Employer-Household Dynamic
PEIS	programmatic environmental impact statement
PIP	Public Involvement Plan
PL	Public Law
Plan	Lower Green River Corridor Flood Hazard Management Plan
PSRC	Puget Sound Regional Council
RCO	Recreation Conservation Office
RM	river mile
SEPA	State Environmental Policy Act
SM	shore mile
USDA	U.S. Department of Agriculture
WAC	Washington Administrative Code
WRIA	Watershed Resource Inventory Area

1. INTRODUCTION

The King County Flood Control District (District) is proposing a Lower Green River Corridor Flood Hazard Management Plan (Plan) for a reach of the Lower Green River and its associated floodplains that occur in portions of the cities of Auburn, Kent, Renton, SeaTac, and Tukwila, as well as unincorporated King County (**Error! Reference source not found.**). The Lower Green River Corridor (corridor) covers approximately 21 river miles (RMs), the equivalent to 42 shoreline miles (SMs), from RM 11 to RM 32. The District is preparing a draft programmatic environmental impact statement (PEIS) that analyzes three alternative approaches to flood risk management in the corridor. The District is a county-wide special purpose district created to provide funding and policy oversight for flood risk reduction capital projects and programs in King County. The goal of the Plan is to provide a long-term approach to reduce flood risks, to address Tribal interests, and to improve fish habitat, while supporting the economic prosperity of the region. In 2014, the District Board of Supervisors (Board) set a provisional level of flood protection for the Lower Green River: a median flow of 18,800 cubic feet per second (cfs), plus 3 feet of freeboard, as measured at the Auburn gage, as the desired level of protection to meet this goal (King County Flood Control District Motion (FCD) 14-09).

The Green River is within the Washington State Department of Ecology's (Ecology's) Water Resource Inventory Area (WRIA) 9. It is 65 miles long between its mouth and the Howard Hanson Dam (HHD) near Palmer in unincorporated King County. As shown in Figure 1-2, it originates from headwaters in the Cascade Mountains in southeastern King County (Upper Green River Subwatershed), flows westward through the Green River Gorge State Park to an alluvial valley in mid-basin (Middle Green River Subwatershed), then turns north near Auburn through a lowland valley (Lower Green River Subwatershed) to the mouth of the Duwamish (Duwamish Estuary Subwatershed). At its confluence with the Black River, the Green River becomes the Duwamish River and continues northward, emptying into Puget Sound's Elliott Bay.

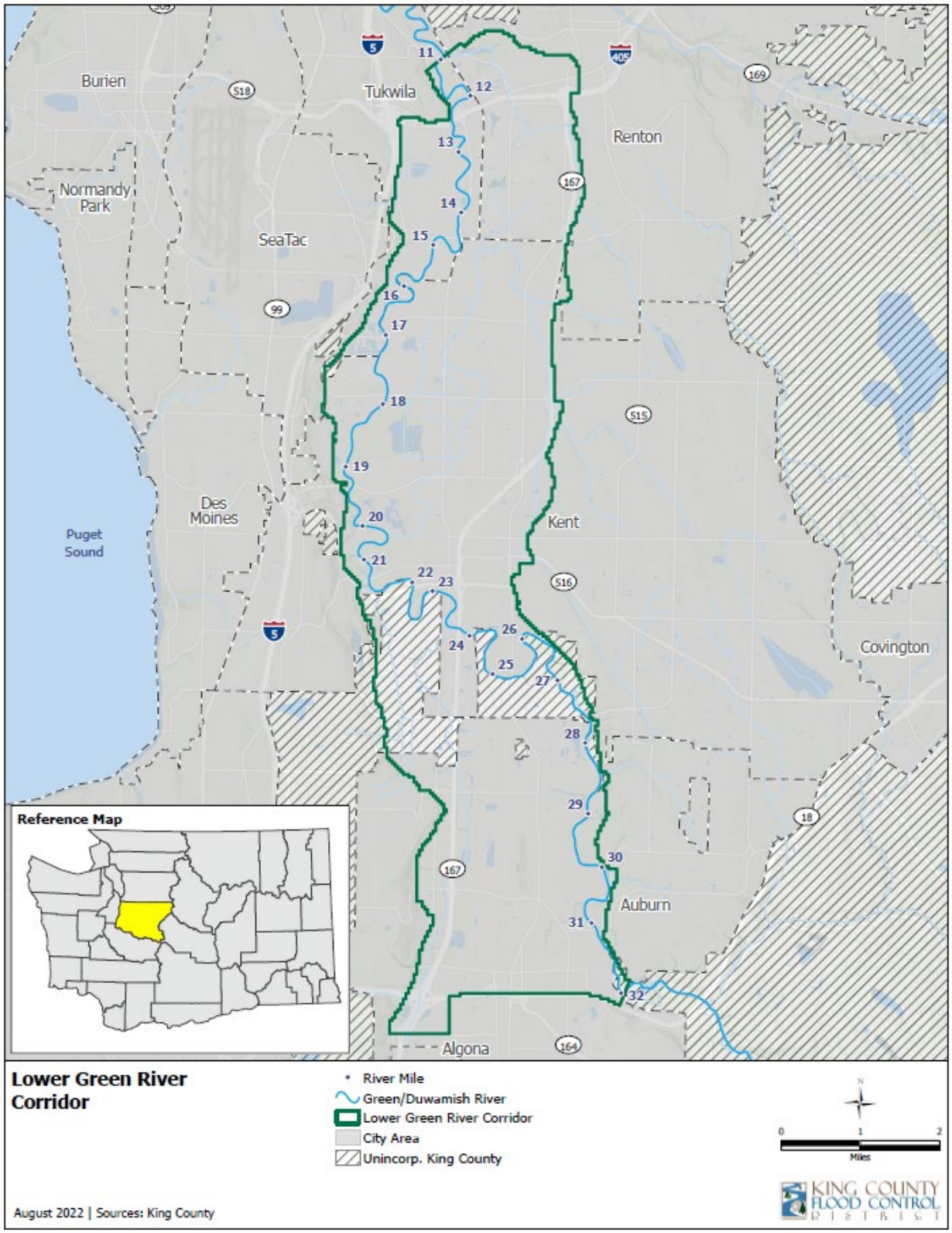


Figure 1-1. Lower Green River Corridor

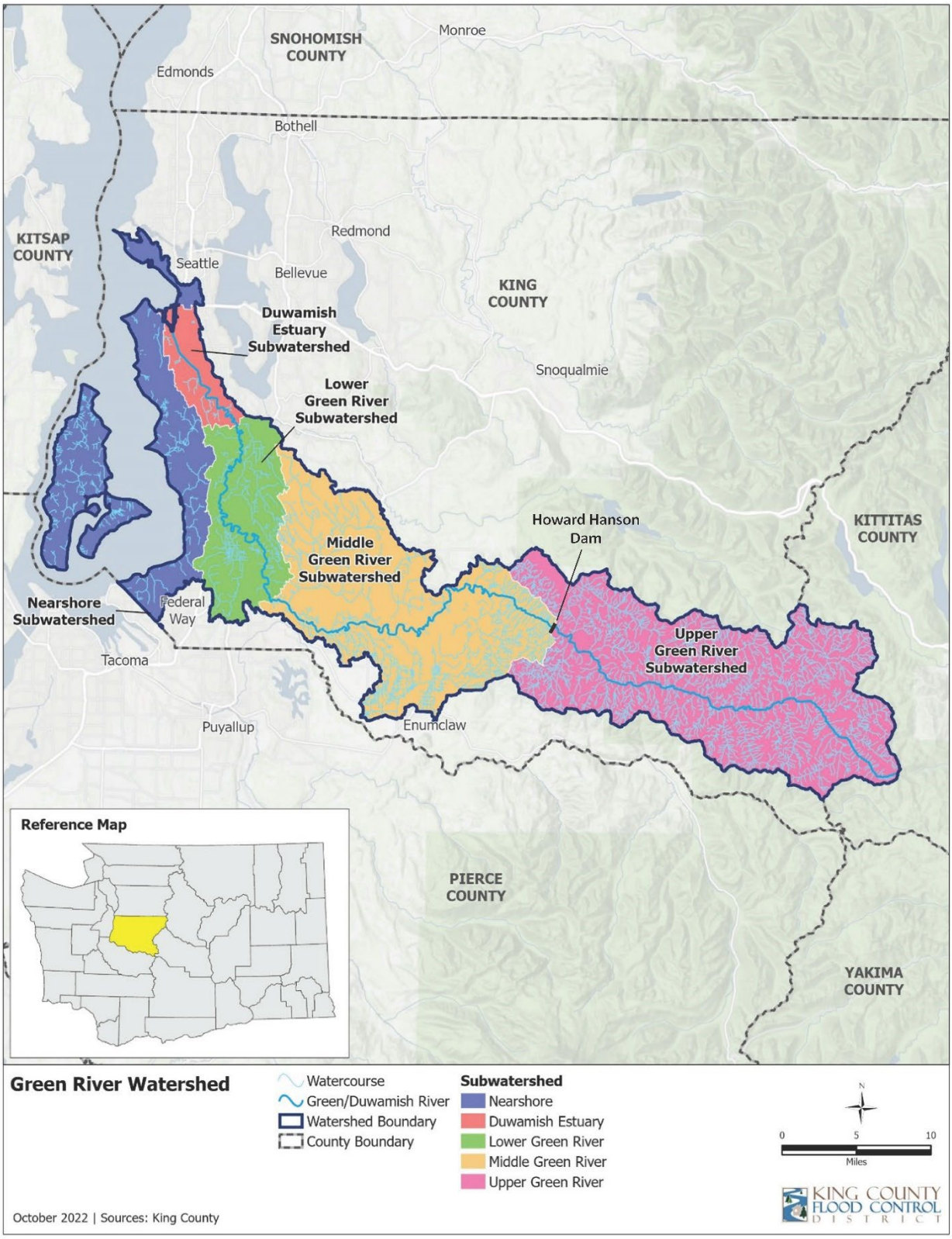


Figure 1-2. Green River Watershed

The information and analysis in the PEIS is based on the following technical appendices:

Appendix A: Alternatives Development describes the main policies and regulations that relate to flood hazard management on the Lower Green River. The appendix briefly explains the need for additional flood hazard management, the proposed alternatives, and how the alternatives were developed. The appendix describes structural and flood proofing approaches to flood management and includes preliminary, planning-level cost estimates.

Appendix B: Natural Environment describes the affected environment, methodologies, potential impacts, and mitigation for elements of the natural environment.

Appendix C: Built Environment describes the methodologies, affected environment, potential impacts, and mitigation for elements of the built environment.

Appendix D: Equity and Social Justice is based on information in appendices B and C and describes disadvantaged populations who experience inequities and how they could be impacted by flooding and flood hazard management.

Appendix E: Tribal Matters describes Tribal treaty rights and interests on the Lower Green River Corridor. The appendix is based on information in appendices B, C, D, and F and describes how Tribal treaty rights and interests intersect with existing conditions on the Green River and the potential impacts of flood hazard management.

Appendix F: Cumulative Impacts describes reasonably foreseeable and potential changes to the environment relevant to the Lower Green River Corridor. These changes are combined with past changes and potential impacts described in appendices B and C to evaluate the potential combined impacts over the 30- to 50-year planning horizon.

Appendix G: Outreach Summary contains outreach efforts during the scoping periods for the PEIS, as well as ongoing outreach and efforts to announce the availability of the draft PEIS.

PEIS Appendix A contains a description of the three alternative approaches to managing flood risk in the Lower Green River Corridor. They are summarized below for readers' convenience.

Alternative 1: Project-by-Project Multibenefit Implementation (No-Action Alternative)

This alternative illustrates how the District would provide flood hazard management on the Lower Green River following established policies and practices without the guidance of an area-specific Plan. Adoption of a Plan for the Lower Green River is the proposed action for the PEIS. This alternative is the benchmark for comparing alternatives.

The District adopted a multibenefit policy in 2020 (FCD Motion 20-07) that would be considered and incorporated to the extent feasible as individual projects were implemented. Flood hazard management projects would be implemented under successive capital improvement plans (CIPs) without guidance from an area-specific Plan for the Lower Green River. Alternative 1 incorporates the CIP approved in FCD Resolution 2021-16 (the 2022 6-year CIP list).

Alternative 2: Systematic Multibenefit Implementation

This alternative would systematically implement the multiple benefits described in FCD Motion 20-07. Implementation would include habitat conservation and fish restoration.

The District would develop an area-specific Plan for the Lower Green River Corridor in collaboration with Tribes, federal and state agencies, local jurisdictions, and stakeholders. The Plan would establish goals and indicators for managing flood hazards, would support a safe and healthy environment for communities along the river, and would conserve and, where possible, enhance aquatic and riparian habitats and conditions to support the recovery of threatened salmon and other species.

The Plan would describe actions the District would take under its authority and would highlight potential partnership opportunities with Tribes, federal and state agencies, local jurisdictions, and stakeholders. The multibenefits described in FCD Motion 20-07 would be systematically advanced in the Plan.

This alternative would introduce the potential use of flood proofing to reduce the effects of flooding, rather than to reduce the risk of flooding.

Alternative 3: Enhanced Systematic Multibenefit Implementation

This alternative would be a substantial shift from the District's current practices. Under this alternative, the District would continue to provide flood hazard reduction, but it would pursue habitat conservation and restoration to a notably greater extent than under either of the other alternatives, while achieving multiple benefits across the Lower Green River.

The District would develop an area-specific Plan for the Lower Green River in collaboration with Tribes, federal and state agencies, local jurisdictions, and stakeholders. This Plan would place a greater emphasis on conserving and restoring habitat for threatened salmon and other species. The Plan would establish goals and indicators for managing flood hazards in a manner that would protect, improve, and restore riparian and aquatic habitats, and it would establish conditions that would support the recovery of threatened salmon and other species. The Plan would describe the actions that the District would take under its authority, and it would highlight potential partnership opportunities with Tribes, federal and state agencies, local jurisdictions, and stakeholders. The multibenefits described in FCD Motion 20-07 would be systematically and rigorously advanced.

With this alternative, the District would maintain enrollment in the Public Law (PL) 84-99 facilities program, but it could, in conjunction with flood hazard management actions, pursue flood management improvements at a scale and design supporting progress towards achieving adopted salmon habitat goals. This alternative would include taking advantage of opportunities to restore habitat functions (e.g., increasing channel capacity to provide backwater or off-channel rearing habitat). With cooperation from local jurisdictions, some adjacent property owners could be provided with incentives to help accommodate these changes.

In addition to flood proofing, this alternative would introduce the potential acquisition of property that would meet certain criteria to preserve floodplain storage.

No Build Scenario

This scenario is included to illustrate the consequences of inaction. The description includes inundation maps and explanations of how the Lower Green River area would be affected by flooding. Because the core mission of the District is managing flood hazards, and this alternative does not provide flood hazard protection throughout the corridor, this scenario is not evaluated in detail as a potential alternative in the PEIS.

Under the No Build Scenario, the District would maintain existing facilities, including PL 84-99 facilities, to meet current requirements. Work would continue on facilities currently under construction. However, projects included in the CIP (2022 6-year CIP) that are not under construction would not proceed. Existing flood hazard management facilities would not be modified to provide the provisional 18,800 cfs level of protection, plus 3 feet of freeboard. No additional flood hazard management actions or related improvements on the Lower Green River would be undertaken.

This appendix evaluates these types of impacts:

- Direct:
  - Impacts that could primarily result from the District's actions to develop new, improved, or relocated flood hazard management facilities
  - Upstream or downstream increases in inundation, in depth, extent, or both, that could be caused by new, improved, or relocated flood hazard management facilities
- Indirect: Reasonably foreseeable impacts that could result from the District's flood hazard management actions, but that would be removed from the action in space and/or time
- Construction: Impacts that would be temporary in nature and that could primarily result from the development of new, improved, and relocated flood hazard management facilities
- Residual inundation: Flooding that could still occur at 18,800 cfs under the three alternatives, but that is not a result of the District's actions

1.1 Overview of Methodology

This report is based on and implements a detailed Equity and Social Justice Methodology (see Attachment A). The methodology identifies 13 Determinants of Equity (Determinants) that shape opportunities to thrive as developed by King County's Office of Equity and Social Justice (Beatty and Foster 2015). The Determinants are:

- Early childhood development
- Education
- Jobs and job training
- Health and human services
- Food systems
- Parks and natural resources
- Built and natural environment
- Transportation
- Community economic development
- Neighborhoods
- Housing
- Community and public safety
- Law and justice

Law and justice is excluded from the analysis because there is no apparent connection between this Determinant and the Plan. For each of the remaining 13 Determinants, key findings are summarized from the analyses in Appendices B and C and well as additional qualitative input received through interviews with local service providers and community organization representatives.

Access to these Determinants of Equity is not uniform across the Lower Green River Corridor. The Puget Sound Regional Council (PSRC) developed an Opportunity Index to help measure and map disparities in access to many kinds of resources associated with the Determinants of Equity. The Opportunity Index is a composite measure that includes five components, each with several measures of neighborhood level conditions (Puget Sound Regional Council 2022):

- Economics (including access to jobs, job growth, and unemployment rate)
- Education (test scores, student poverty, teacher qualifications, and graduation rates)
- Health and Environment (proximity to parks and open space, toxic release sites, and healthy food)
- Housing and neighborhood quality (housing condition, vacancy rates, and crime)
- Mobility and transportation (drive commute cost, access to transit, walkability)

Figure 1-3 shows a map of all Census tracts in the Lower Green River Corridor. Each Census tract is classified by its Opportunity Index level, ranging from “Very Low” to “Very High.” Tracts with lower Index scores lack have less access to the kinds of resources and amenities that support all residents in their ability to succeed and excel in life. Conversely those with higher scores have greater access and proximity to these resources and amenities. In this report, this Index is used to analyze how the location of potential impacts relates to the Opportunity Index level of affected Census tracts. For example, it addresses questions such as:

- Are there direct negative impacts to sociate resources in Census tracts with Very Low or Low Opportunity Index scores?
- Is residual inundation more severe in lower opportunities areas or higher opportunity areas? compared to other tracts?

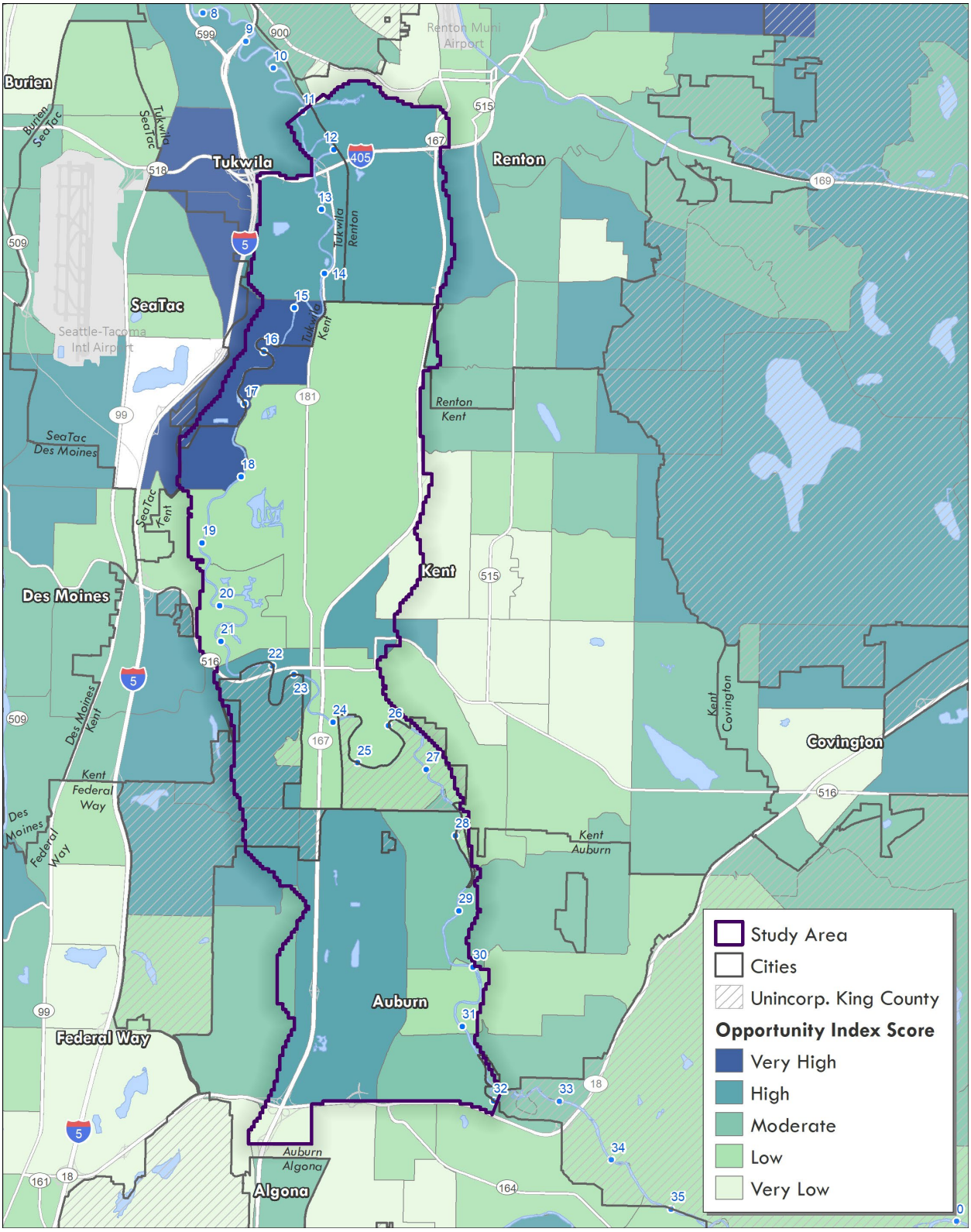


Figure 1-3. Opportunity Index Scores in the Lower Green River Corridor

Source: Puget Sound Regional Council, 2019; BERK, 2022.

Note: Tracts with lower scores lack have less access to the kinds of resources and amenities that support all residents in their ability to succeed and excel in life.

2. FINDINGS

2.1 Disadvantaged Populations in the Lower Green River Corridor

The Lower Green River Corridor is home to a diverse population of over 50,000 residents. Compared to population in the remainder of King County, a disproportionally high percentage of these residents are overburdened and underserved, and therefore face barriers and disadvantages with regard to achieving positive life outcome. The median household income in the Lower Green River Corridor was $55,619 in 2020, compared to $100,598 county-wide.[1] Lower Green River Corridor residents are more likely to have incomes below the poverty level (14 percent versus 9 percent county-wide)[2] and to be people of color (58 percent versus 46 percent county-wide)[3]. About 6 percent of residents age 5 or above do not speak English well, compared to 5 percent county-wide. About 65 percent of households are renters, compared to 44 percent county-wide. Among those renter households, over half (52 percent) are cost-burdened, compared to 44 percent county-wide.[4] A quarter (25 percent) of all households have a member with a disability, compared to 19 percent county-wide.[5] These characteristics can contribute to higher vulnerability and reduced social and financial resources that can support resiliency during and in the aftermath of a flooding event.

There is a great deal of variation in the Lower Green River Corridor with regard to access to opportunity, as measured by PSRC's Opportunity Index (PSRC 2019). As shown in Figure 1-3 above, Census tracts within the corridor range from a rating of Very High to Very Low. Table 2-1 summarizes the total population living in the corridor by jurisdiction and Opportunity Index Level. Nearly half of the population live in areas rated Very Low or Low, and nearly all these residents live in Kent or Auburn. These residents are most likely to lack access to Determinants of Equity.

Table 2-1. Estimated Population by PSRC Opportunity Index Level

Jurisdiction	Very Low	Low	Moderate	High	Very High	Total
Auburn	0	5,193	12,755	3,075	0	21,023
Kent	2,981	16,555	0	7,414	629	27,579
Renton	2	0	0	42	0	44
Tukwila	0	0	0	1,477	0	1,477
Unincorporated King County	0	59	0	112	3	173
Total Lower Green River Corridor	**2,983**	**21,806**	**12,755**	**12,120**	**631**	**50,295**

Source: King County Assessor 2020; PSRC, 2019; BERK, 2022.

[1] Source: Esri Demographics, 2020 (based on ACS 2013-2018 5-year estimates).

[2] Source: Esri Demographics, 2020 (based on ACS 2013-2018 5-year estimates).

[3] Source: U.S. Census, 2020.

[4] A household is considered to be cost-burdened if it is spending more than 30 percent of its income on housing costs. This leaves less funding available for other necessities like transportation, food, clothing, and education. Source: Esri Demographics 2020 (based on ACS 2013-2018 5-year estimates).

[5] Source: Esri Demographics 2020 (based on ACS 2013-2018 5-year estimates).

2.2 Summary of Potential Impacts by Determinants of Equity

The sections below provide information regarding the Determinants. Section 1.1 provides a list and Attachment 1 provides a description of each of the determinants. Only 12 of these Determinants are analyzed in this report. The remaining determinant, "Law and Justice," was not related to the Plan.

2.2.1 Early Childhood Development

Early childhood development facilities and programs support nurturing relationships, high quality, affordable childcare, and early learning opportunities that promote optimal early childhood development and school readiness for all children. There are 25 licensed childcare centers or family daycare centers serving 1,348 children in the Lower Green River Corridor. Most of these facilities are in Auburn (16) and Kent (7) with the remainder in Renton (2).

2.2.1.1 Potential Equity-Related Impacts to Early Childhood Development

Impacts of new and modified flood hazard management facilities

No impacts would be anticipated to childcare facilities in the Lower Green River Corridor based on new, improved, and relocated flood hazard management facilities expected under any of the alternatives.

Residual inundation

All three of the alternatives would substantially reduce the extent of flooding in the Lower Green River Corridor at 18,800 cubic feet per second (cfs) compared to existing conditions. However, some early childhood development facilities could still experience residual inundation[6]. Table 2-2 summarizes the number of early childhood development facilities that could be inundated by at least 1 foot of water in an 18,800 cfs flooding scenario by PSRC's Opportunity Index level. As shown, all three of the alternatives could reduce the number of inundated facilities in Low Opportunity areas compared to existing conditions. However, one facility in Low Opportunity areas and up to four in High Opportunity areas could still be inundated at 18,800 cfs. There would be no difference between the alternatives with regard to potential inundation impacts to early childhood development facilities.

Table 2-2. Early Childhood Development Facilities by PSRC Opportunity Index Level and Residual Inundation Status in Inundated >=1 Foot at the 18,800 cfs Scenario

	Very Low	Low	Moderate	High	Very High
Total Facilities in Corridor	**0**	**10**	**8**	**7**	**0**
Count of Facilities Inundated by >= 1 foot in the 18,800 cfs Scenario					
Existing Conditions	0	4-6	0-1	2-4	0
Alternative 1	0	0-1	0	2-4	0
Alternative 2	0	0-1	0	2-4	0
Alternative 3	0	0-1	0	2-4	0

Note: Inundation modeling based on an 18,800 cfs flood event.

Source: King County Assessor, 2020; **Parametrix, 2022; BERK, 2022**

[6] Throughout this appendix, residual inundation refers to the flooding that would still potentially occur in the Lower Green River Corridor under each alternative during an 18,800 cfs flood event.

2.2.2 Education

Schools are essential to providing education and skills that benefit individuals and the community at large. Equitable schools provide high-quality learning opportunities and a welcoming environment for students of all backgrounds. Eleven K-12 public schools in four school districts, six private schools (three affiliated with religious organizations and three Montessori schools), and one vocational/technical training center are located in the Lower Green River Corridor. Most of these are located in Auburn (13), with the remainder in Kent. Additionally, a variety of non-profit organizations serve children and youth who live in the Lower Green River Corridor with expanded learning programs that are culturally and developmentally responsive. There are 36 programs in the Green River Corridor, including programs located in Kent (16), Auburn (14), Renton (4), and Tukwila (2) (King County Assessor, 2020; Schools out Washington 2017).

2.2.2.1 Potential Equity-Related Impacts

Impacts of new and modified flood hazard management facilities

No impacts of new, improved, and relocated flood hazard management facilities would affect school facilities in the Lower Green River Corridor.

Residual inundation

Several schools and school facilities in the Lower Green River Corridor could be at risk of impacts from inundation of 1 foot or more during an 18,800 cfs flood event. Under existing conditions, three schools in Kent (one in a Low opportunity Area) and two in Auburn could see this level of inundation. All three alternatives could reduce the number of schools and school facilities that would be flooded; however, one small private school in a High Opportunity Area in Auburn could still be inundated.

About 17 to 25 of the extended learning program locations would be at risk of inundation impacts, most of them in Kent (11 to 15), under existing conditions. Each of the three alternatives could reduce the number of inundated program locations to 2 to 4 programs. These programs are all located in High Opportunity areas, according to PSRC.

2.2.3 Jobs and Job Training

Access to jobs and job training provide residents with the knowledge and skills to compete in a diverse workforce and with the ability to make enough income for the purchase of basic necessities to support them and their families. Most jobs in the Lower Green River Corridor are in businesses located in areas zoned for commercial and industrial uses. The proximity of these job opportunities to housing is an important factor in determining how accessible employment is for disadvantaged communities. Table 2-4 shows estimates of how many jobs are located in areas that could see 1 foot or more inundation in an 18,800 cfs flood event, by PSRC Opportunity Index Level. Each of the three alternatives would result in substantial reductions in inundation impacts compared to existing conditions, particularly Kent where most jobs at risk of inundation are located in Low Opportunity areas. However, Tukwila and Auburn could see an increase in the number of jobs that are potentially inundated under all three alternatives. While most of the jobs that would be inundated under the alternatives are located in High Opportunity areas, many of the workers would likely be from disadvantaged populations. Nearly half of the jobs in these areas pay the equivalent of about $40,000 per year in wages.[7]

[7] Source: BERK analysis of LEHD data from U.S. Census Bureau, 2022.

2.2.3.1 Potential Equity-Related Impacts

Impacts of new and modified flood hazard management facilities

The flood hazard management facilities under Alternatives 1 and 2 could have minimal impacts on existing structures sited on industrial or commercial land. Alternative 3's facilities could potentially impact and displace about 30 to 50 structures containing a variety of business types, mostly in unincorporated King County and Tukwila (Table 2-3).

Table 2-3. Structures on Industrial or Commercial Land Directly Impacted by Flood Hazard Management Facilities

	Alternative 1	Alternative 2	Alternative 3
Renton	0	0	0
Tukwila	0	0	10 – 20
Kent	0	0	1-3
Unincorporated King County	0-2	0-2	15 – 25
Auburn	0	0	0
Total Corridor	0-2	0-2	26 – 48

Source: King County Assessor, 2020; Parametrix 2022; BERK, 2022

Inundation

Inundation of 1 foot or more during an 18,800 cfs flood event could temporarily displace tens of thousands of jobs in the Lower Green River Corridor, and could potentially cause permanent damage to employment facilities. This inundation could be the result of District actions or residual inundation. Under existing conditions, an estimated 57,000 to 85,500 jobs could be at risk of this level of inundation, most of which would be in Low Opportunity Areas in Kent (42,000). The alternatives would reduce the overall potential job loss due to inundation. The inundation and potential job loss would be distributed among the jurisdictions in the Lower Green River Corridor, and most of the inundation would occur in High Opportunity areas (Table 2-4). Auburn could see the greatest job impacts due to inundation under Alternatives 1 and 2, while Renton and Tukwila could be most impacted by inundation under Alternative 3.

Table 2-4. Jobs Impacted by 1+ ft Inundation by PSRC Opportunity Index Level

Jurisdiction	Very Low	Low	Moderate	High	Very High	Total
Existing Conditions						
Renton	0	0	160–250	10,500–15,800	0	10,700–16,000
Tukwila	0	0	0	840–1,300	1,800–2,800	2,700–4,000
Kent	450–700	34,000–51,000	0	2,700–4,100	1,700–2,500	38,800–58,300
Unincorporated King County	0	260–400	0	0	0	300–400
Auburn	0	47–70	1,000–1,500	3,500–5,200	0	4,500–6,800
Total Corridor	**450–700**	**34,000–51,000**	**1,100–1,700**	**18,000–26,000**	**3,500–5,200**	**57,000–85,500**

Table 2-4. Jobs Impacted by 1+ ft Inundation by PSRC Opportunity Index Level (continued)

Jurisdiction	Very Low	Low	Moderate	High	Very High	Total
Alternative 1: Project						
Renton	0	0	160–250	5,100–7,600	0	5,200–7,900
Tukwila	0	0	0	1,800–2,700	1,600–2,300	3,300–5,000
Kent	0	1,000–1,500	0	510–760	30–46	1,600–2,300
Unincorporated King County	0	240–350	0	0	0	200–400
Auburn	0	2–4	700–1,000	5,300–7,900	0	6,000–8,900
Total Corridor	**0**	**1,300–1,900**	**850–1,300**	**13,000–19,000**	**1,600–2,400**	**16,300–24,500**
Alternative 2						
Renton	0	0	160–250	5,100–7,600	0	5,200–7,900
Tukwila	0	0	0	2,800–4,200	1,600–2,400	4,400–6,500
Kent	0	1,500–2,200	0	510–760	30–46	2,000–3,000
Unincorporated King County	0	240–350	0	0	0	200–400
Auburn	0	21–31	690–1,000	6,000–9,100	0	6,800–10,100
Total Corridor	**0**	**1,700–2,600**	**860–1,300**	**14,000–22,000**	**1,600–2,400**	**18,600–27,900**
Alternative 3						
Renton	0	0	160–250	5,900–8,800	0	6,000–9,000
Tukwila	0	0	0	4,700–7,000	1,600–2,400	6,200–9,300
Kent	0	1,800–2,700	0	510–760	30–46	2,300–3,500
Unincorporated King County	0	300–400	0	0	0	300–400
Auburn	0	22–34	660–1,000	4,400–6,500	0	5,000–7,500
Total Corridor	**0**	**2,100–3,100**	**800–1,200**	**15,000–23,000**	**1,600–2,400**	**19,900–29,800**

Note: Inundation modeling is based on an 18,800 cfs flood event.

Sources: U.S. Census Bureau, 2022; Parametrix 2022; BERK 2022.

Several job training programs for youth and young adults operate in the Lower Green River Corridor. None of the location-specific job training centers is located in areas likely to experience inundation.

2.2.4 Health and Human Services

Equitable health and human services (HHS) facilities promote equity when they are high quality, affordable, culturally appropriate, and they support the optimal well-being of all people. Data are available about five kinds of HHS facilities in the Lower Green River Corridor: veteran HHS levy program locations, fire/police stations, medical facilities, hospitals, and public health clinics. These facilities have been identified as important pieces of infrastructure to ensure community well-being, health, and safety. The Veterans, Seniors, and Human Services Levy funds programming, support, and affordable housing for veterans and residents who are 55 years and older. There are 29 Veteran, Seniors, and Human Services Levy program locations in the Green River Corridor, most of which are located in Kent (14) and Auburn (11), with the reminder located in Renton (4). Fire Stations and Police Stations provide important services that support community well-being, including emergency response and prevention, often provided by first responders. There are nine Fire/Police Stations spread across Kent (5) and Auburn (2), Tukwila (1), and Renton (1). There are eight medical facilities in the Lower Green River Corridor. These are located in Auburn (4), Kent (3), and Tukwila (1). Additionally, there is one hospital in the Lower Green River Corridor, located in Auburn, and one public health clinic, which is also located in Auburn.

2.2.4.1 Potential Equity-Related Impacts

Impacts of new and modified flood hazard management facilities

No impacts would be anticipated to health and human service facilities in the Lower Green River Corridor based on new, improved, and relocated flood hazard management facilities expected under any of the alternatives.

Residual Inundation

Currently there are approximately 20 facilities or program locations at risk of flooding under existing conditions. All three of the alternatives could protect these facilities from flooding. All three of the alternatives could result in substantial improvements compared to existing conditions in protecting the existing facilities from inundation. Table 2-5 summarizes the number of health and human services facilities and program locations that could be inundated by at least 1 foot in an 18,800 cfs flooding scenario by PSRC's Opportunity Index Level.

Table 2-5. Health and Human Services Facilities and Program Locations by PSRC Opportunity Index Level and Residual Inundation Status in Inundated >=1 Foot at the 18,800 cfs Scenario

	Very Low	Low	Moderate	High	Very High
Total Facilities and Program Locations in Corridor	**0**	**17**	**11**	**20**	**0**
Facilities Inundated by >= 1 foot in the 18,800 cfs Scenario					
Existing Conditions	0	9-13	4-6	4-6	0
Alternative 1	0	0	0	0	0
Alternative 2	0	0	0	0	0
Alternative 3	0	0	0	0	0

Note: Inundation modeling based on an 18,800 cfs flood event.

Source: Washington Department of Health and Human Services (public health spatial layers) 2020; Parametrix, 2022; BERK 2022.

2.2.5 Food Systems

Food systems promote equity when they support local food production and provide access to affordable, healthy, and culturally appropriate foods for all people. Facilities in the Lower Green River Corridor that either support the production of, or provide access to, food are grocery stores, farms, and food banks. There are 15 grocery stores in the Green River Corridor distributed throughout Auburn (7), Kent (5), Tukwila (2), and Renton (1). Seven farms are located in the Green River Corridor, all of which are in Unincorporated King County (5) and Kent (2). Additionally, there are two food banks in the Lower Green River Corridor, one in Kent and one in Auburn.

2.2.5.1 Potential Equity-Related Impacts to Food Systems

Impacts of new and modified flood hazard management facilities

No impacts would be anticipated to food systems facilities in the Lower Green River Corridor based on new, improved, and relocated flood hazard management facilities expected under any of the alternatives.

Residual Inundation

Table 2-6 summarizes the number of food system facilities that could be inundated by at least 1 foot of water in an 18,800 cfs flooding scenario by PSRC's Opportunity Index Level. All three alternatives would reduce the number of food system facilities that could be inundated compared to existing conditions.

Based on modeling results, no grocery stores or food banks would be inundated under the alternatives. However, up to six out of the seven farms in the Lower Green River Corridor could be inundated under each alternative.

Table 2-6. Grocery Stores, Farms, and Foodbanks by PSRC Opportunity Index Level and Residual Inundation Status in Inundated >=1 Foot at the 18,800 cfs Scenario

	Very Low	Low	Moderate	High	Very High
Total Facilities in Corridor	**1**	**9**	**4**	**10**	**0**
Facilities Inundated by >= 1 foot in the 18,800 cfs Scenario					
Existing Conditions	0-1	4-6	0	5-7	0
Alternative 1	0	2-4	0	2-4	0
Alternative 2	0	2-4	0	2-4	0
Alternative 3	0	2-4	0	2-4	0

Note: Inundation modeling based on an 18,800 cfs flood event.

Source: King County Assessor, 2020; Parametrix, 2022; BERK, 2022.

2.2.6 Parks and Natural Resources

Parks and natural resources promote equity when they provide access for all people to safe, clean, and quality outdoor spaces, and facilities; and when they provide activities that appeal to the interest of all communities.

Within the corridor, there are over 1,600 acres of parkland and open space. Parks and recreation facilities are found across the Lower Green River Corridor. They are focused along the Green River, with the greatest areas of concentration in RMs 11, 18, and 21. As shown in Figure 2-1, Low Opportunity Areas are generally along RMs 18 to 27 and RMs 30 to 31. Potential equity impacts are addressed in Section 2.2.6.1 Potential Equity-related Impacts to Parks and Natural Resources.

Comments related to equity gathered during community engagement efforts highlighted the following parks:

- Black River Forest (Renton, High Opportunity Area): Large unhoused population
- Springbrook Trail (Renton, High Opportunity Area): Recreation use
- Lake to Sound Trail (Renton/Tukwila, High Opportunity Area, unmapped): Connecting Fort Dent to Black River Forest
- Russel Road Park (Kent, Low Opportunity Area): Summer baseball and tournaments that are important for recreation and economy
- Brennan Park (Auburn, Moderate Opportunity Area): Important for families with school aged children, including middle school, given play fields and structures. It also has had homeless encampments due to the proximity to the Auburn service hub.

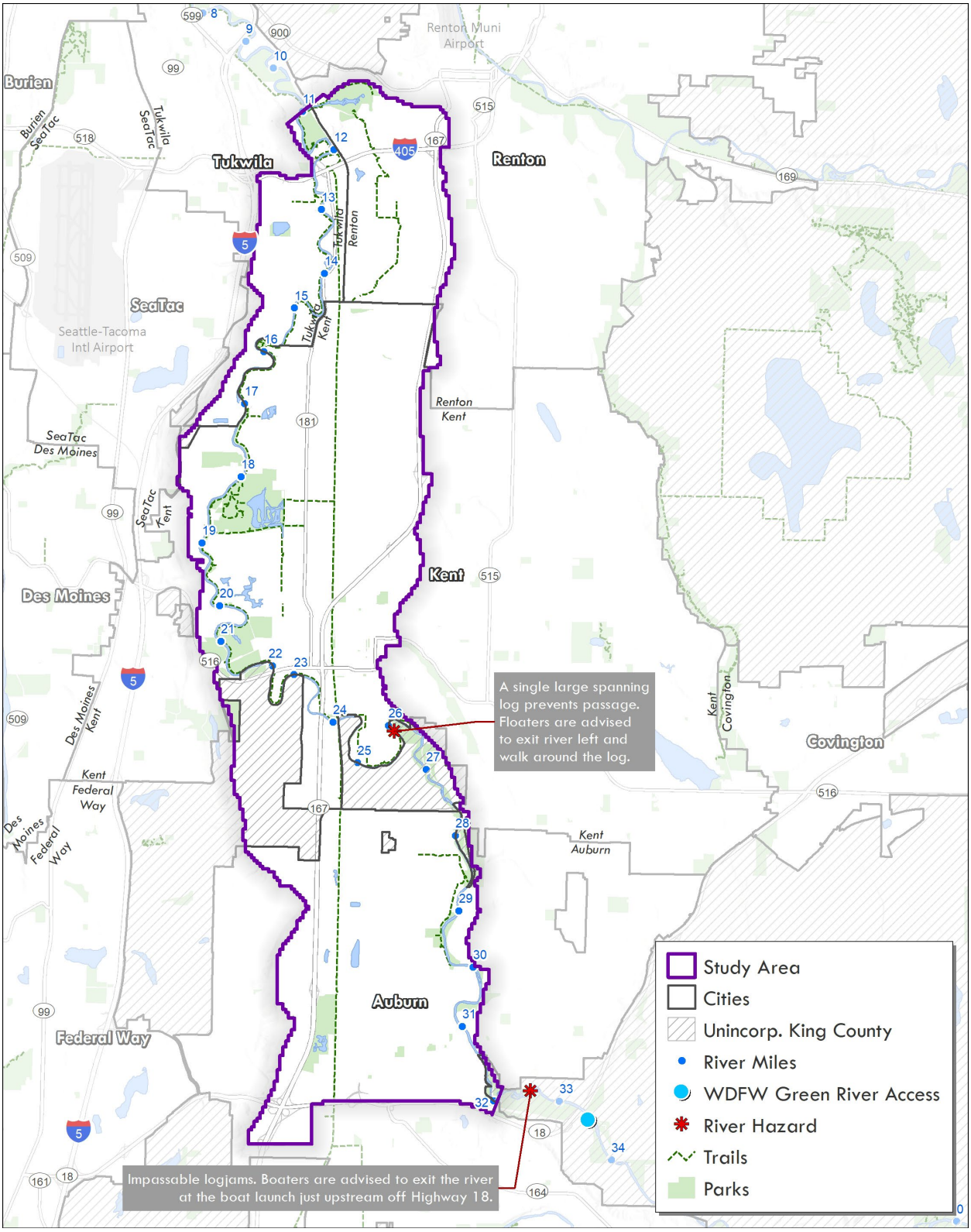


Figure 2-1. Parks and Recreation Facilities in the Lower Green River Corridor
Source: King County Assessor, 2020; BERK 2020.

2.2.6.1 Potential Equity-related Impacts to Parks and Natural Resources

Impacts of new and modified flood hazard management facilities

All alternatives would include new, improved, and/or relocated flood hazard management facilities that could displace or reduce the area of existing parks, trails, and open space. Table 2-7 shows the total acres parks and open space in Very Low, Low, and Moderate Opportunity Areas by jurisdiction, as well as the percentage of those acres that may by impacts by new, improved, or relocated facilities. Auburn could have the greatest share of impacted acres, followed by Kent. Alternative 2 could have a slightly lower share of acres affected in Auburn, though total acres affected could be similar to Alternative 1. Alternative 3 could affect the most acres in the overall corridor, with greater effects in Kent and Auburn, as well as in Unincorporated King County.

Table 2-7. Direct Parks and Open Space Impacts in Very Low, Low, and Moderate Opportunity Areas

	Total Park and Open Space Acres in Very Low, Low, and Moderate Opportunity Areas	Alternative 1. Percent of Acres with Direct Impacts	Alternative 2. Percent of Acres with Direct Impacts	Alternative 3. Percent of Acres with Direct Impacts
Renton	0	0%	0%	0%
Tukwila	613	0%	0%	0%
Kent	0	3 – 4%	3 – 4%	4-6%
Unincorporated King County	122	3-5%	~1%	26-39%
Auburn	280	11 – 17%	10 – 16%	11 – 17%
Total	1,015	**5-8%**	**5-7%**	**8-13%**

Source: King County Assessor, 2020;; Parametrix, 2022; BERK 2022.

Potential loss of parkland or trails acquired with state or local funds requiring mitigation

Some parkland or trails were acquired or developed with Conservation Futures (CF) or Recreation Conservation Office (RCO) funding as listed in Table 2-8; the table summarizes information from Appendix C, Chapter 3. Kent and Auburn have the most parkland in the Lower Green River Corridor and the most acquired by State RCO funds and CF funding. Thus, there could be a need for park acreage replacement if flood hazard management facilities were to displace such parkland. A preference to replace acres and trails in Low and Very Low Opportunity Areas area could be helpful to supporting more equitable outcomes with regards to access to parks and natural resources.

Table 2-8. Parks Acquired with Conservation Futures Funding and the Recreation Conservation Office

Park	Jurisdiction	Conservation Futures (CF)/ Recreation Conservation Office (RCO)
Black River Forest	Renton	CF
Green River Natural Resources Area	Kent	CF
Kent Memorial Park	Kent	RCO
Lake Fenwick Park	Kent	CF
Hogan Park at Russell Road	Kent	RCO
Green River Trail Site	Multiple	RCO
Horsehead Bend Natural Area	King County	RCO
North Green River Park	King Co, Auburn	RCO
104th Avenue SE Park	Auburn	RCO
Auburn Environmental Park	Auburn	RCO
Brannan Park	Auburn	RCO
Fenster Nature Park	Auburn	RCO, CF

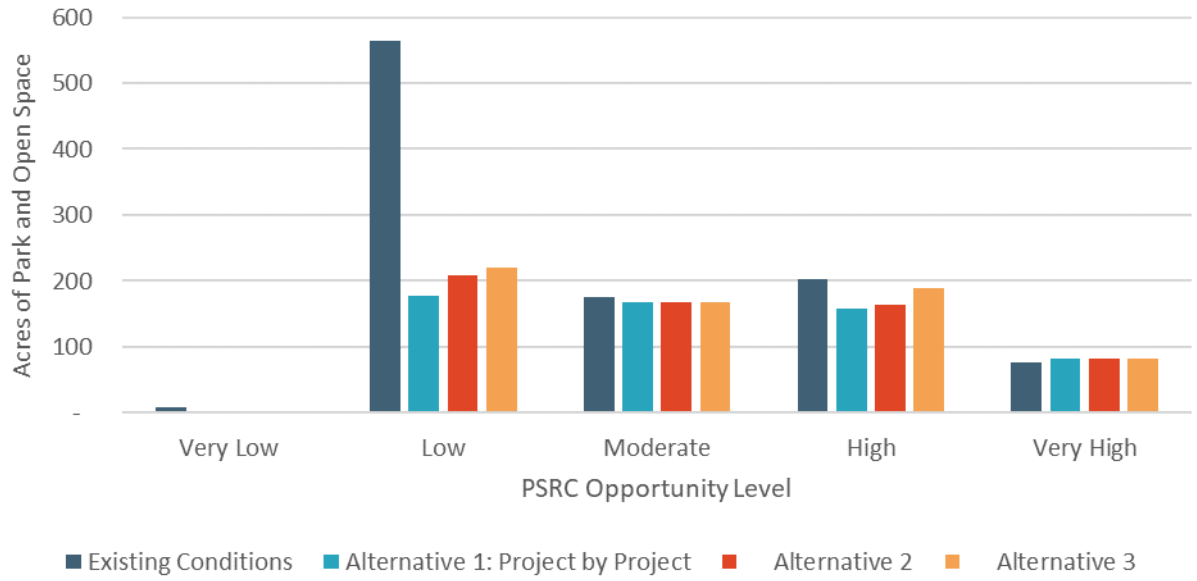
Source: King County Assessor; BERK 2020.

Residual Inundation

Although all the alternatives would reduce the extent of inundation compared to existing conditions, all alternatives could still have residual inundation that could affect ongoing use and maintenance of park and trail facilities. In each alternative, about one-quarter to one-half of the park acreage in the Lower Green River Corridor could be inundated to a depth of 1 foot or more, which could cause damage, and nearly the same amount of acreage could be inundated to a depth of 4 feet or more, which could mean a change in the size and shape of, or a decrease in the number of acres available for recreation.

As shown in Figure 2-2, the total amount of park acreage at risk of this depth of inundation could be much higher under existing conditions compared to the alternatives. Nearly all this difference would be due to substantial reductions in Low Opportunity Areas at risk of inundation under all three alternatives. There would be only minor differences between the alternatives regarding impacts to parkland in Moderate, High, and Very High Opportunity Areas. However, Alternative 1 could result in the least inundation overall, and somewhat lower inundation in Low Opportunity Areas than under Alternatives 2 and 3.

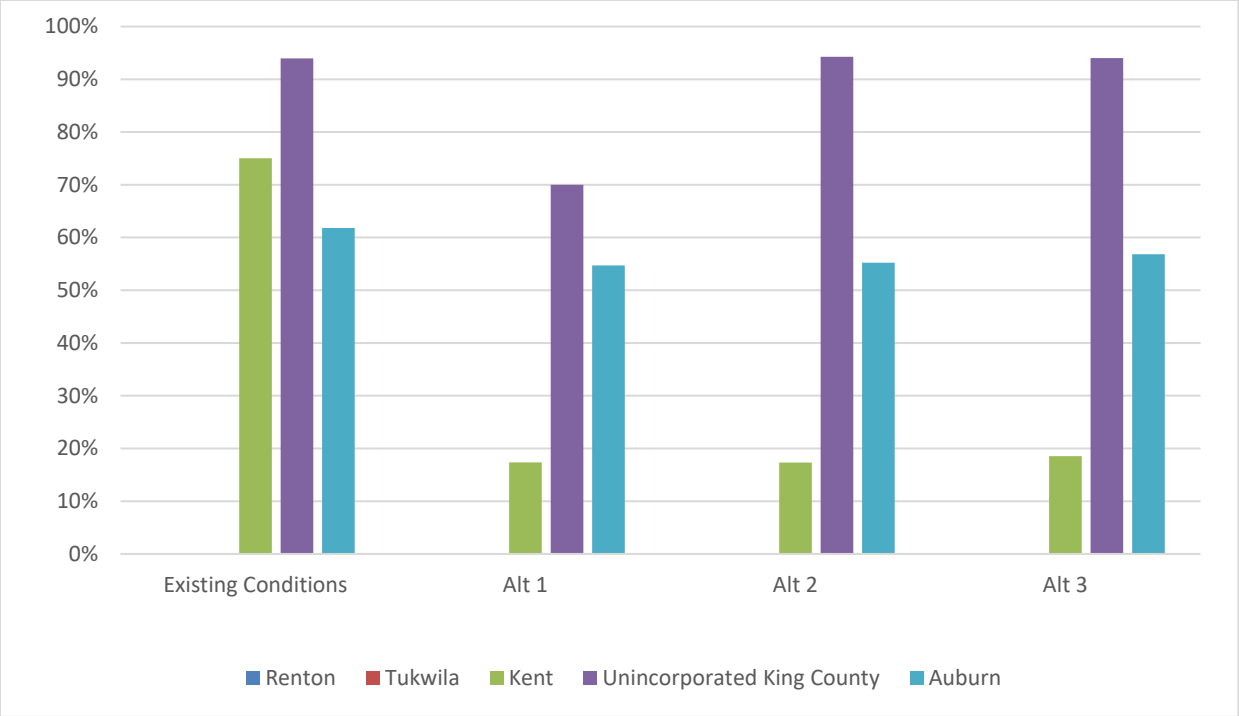
Figure 2-3 provides another view of residual inundation[8]. It compares the alternatives with regard to the percentage of all parks and open space acreage in Very Low, Low, or Moderate Opportunity Areas that could be inundated by 4 feet or more during an 18,800 cfs event. It shows the benefits of the alternatives compared to existing conditions that are primarily seen in Kent. However Alternative 1 could show some benefits in unincorporated King County, as well.



Note: Inundation modeling is based on an 18,800 cfs flood event.

Figure 2-2. Parkland Inundated 4 feet or Higher by Opportunity Level
Source: King County Assessor, 2020; Parametrix, 2022; BERK 2022.

[8] The slightly worsened flooding in Very High Opportunity areas could be the result of District actions to manage flooding in other locations.



Note: Inundation modeling is based on an 18,800 cfs flood event.
Source: King County Assessor, 2020; Parametrix, 2022; BERK, 2022.

Figure 2-3. Percentage of 4+ Foot Inundated Park and Open Space Acreage in Very Low, Low, or Moderate Opportunity Areas

Based on modeling results, some parks and recreation facilities would not be impacted by residual inundation in any of the alternatives. The roadways serving these parks and facilities also would not be expected to be impacted by residual inundation that could impede normal vehicle travel. Therefore, access challenges to these parks and facilities would not be expected under any alternative.

2.2.7 Built and Natural Environment

Community environmental health can be supported by a built and natural environment that includes a mix of land use that support jobs, housing, amenities, and services; trees and forest canopy; and clean air, water, soil, and sediment. Each alternative would have the potential to affect environmental health through impacts to the tree canopy and water quality due to development of flood hazard management facilities. In the Lower Green River Corridor, concentrations of tree canopy are predominantly located adjacent to the Green River in parks and open-space land, agriculture land with forested riparian buffers, conservation land, and adjacent to single-family uses.

2.2.7.1 Potential Equity-Related Impacts to the Built and Natural Environment

Impacts of new and modified flood hazard management facilities

Existing tree canopy along the Lower Green River Corridor would be most likely to experience impacts due to the development of new, improved, and relocated flood hazard management facilities. These impacts could be temporary—until replacement trees were established. Associated impacts of removed tree canopy could include warmer water temperatures due to lack of available shade, impacts to soil and sediment along the river from steepened levee and floodwall slopes, and removal of associated riparian vegetation. All of these potential effects could impact the habitat's ability to clean air and water

and may produce inequitable environmental impacts to surrounding communities. Table 2-9 summarizes the acres of potential impact to parks and open space areas by alternative. In Alternatives 1 and 2, about one third of all impacts would be in Low Opportunity areas. In Alternative 3 over half of all impacts would be in Low Opportunity areas.

Table 2-9. Acres of Direct Parks and Open Space Impacts by Alternative and Opportunity Area

	Very Low	Low	Moderate	High	Very High	Total
Alternative 1	0	25 - 37	28 - 42	7 - 11	11 - 17	71 - 107
Alternative 2	0	23 - 35	25 - 38	8 - 12	11 - 17	67 - 101
Alternative 3	0	61 - 91	25 - 38	8 - 12	11 - 17	105 - 158

Source: King County Assessor, 2020;; Parametrix, 2022; BERK 2022.

The District would set future flood hazard management facilities as far back from the river channel as practicable, which may lead to the potential loss of existing tree canopy. As noted above, this potential loss could be temporal, as the setback would provide opportunities to reestablish vegetation. In particular riparian zones and upland tree buffers adjacent to the river could experience impacts as a result of the proposed facilities under Alternative 1, which could produce negative downstream impacts on water temperature, and water and air quality. Because of this, Alternative 1 would likely have the greatest impact on the natural environment and would create more inequitable impacts to communities along the Lower Green River Corridor.

In Alternatives 2 and 3, the District would set future flood hazard management facilities as far back from the river channel as practicable while recognizing that impacts to the built environment could be necessary to provide environmental improvements. It is likely that a temporal loss of tree canopy would be experienced due to the setbacks required for the improvement of flood hazard management facilities, but there would be opportunities to reestablish the lost vegetation and tree canopy as part of future facility design.

Residual Inundation

Impacts to existing tree canopy could be limited based on the extent of residual inundation. Established trees that are not impacted by flood hazard management facilities could survive a flood event based on the season, duration, and depth of the flood event.

2.2.8 Transportation

An equitable transportation system is one that provides everyone with safe, efficient, affordable, convenient, and reliable mobility options that include public transit, walking, carpooling, and biking. Transportation systems rely on an integrated network that accommodates a wide range of needs, modes, and functions. A variety of transit facilities exists in the Lower Green River Corridor. These facilities include passenger and freight rail, bus transit, pedestrian and trails facilities, and a robust road network for vehicular travel. Impacts to critical transit infrastructure in the Lower Green River Corridor may be felt throughout the region due to its proximity to the Kent manufacturing/industrial center. At a more granular level, impacts to transit facilities could result in a disrupted or disconnected network that could disproportionately impact those who need to cross the Lower Green River. Each alternative could result in impacts to passenger and freight rail, bus transit, pedestrian and trails facilities, and the road network.

2.2.8.1 Potential Equity-Related Impacts to Transportation

Impacts of new and modified flood hazard management facilities

Construction of flood hazard management facilities could result in temporary access limitations for rights-of-way adjacent to, or sharing an access network with, the Green River. Construction impacts to some local arterials and roadways could impact accessibility and prompt individuals to seek alternative routes. However, construction would not be expected to result in any permanent closures or removal of roadways or transit facilities.

Residual Inundation

All three alternatives would substantially reduce the extent of inundation on roads and the transit system in the Lower Green River Corridor for the 18,800 cfs flood event compared to existing conditions (Table 2-10). However, residual inundation of commuter passenger rail corridor, bus transit corridors, and roadways could potentially occur under all three alternatives to a similar extent.

Table 2-10. Comparison of Roads and Transit System Inundated 1 Foot or Higher (linear miles unless otherwise stated)

Transportation Facility	Jurisdiction	Total Length of Facility within Corridor	Existing Conditions	Alternative 1	Alternative 2	Alternative 3
Commuter Passenger Rail	Renton	0	0	0	0	0
	Tukwila	2.6	0	0	0	0
	SeaTac	0	0	0	0	0
	Kent	5.5	99 feet	1 -3 feet	11 - 17 feet	17 - 25 feet
	Uninc. King County	0.5	0	0	0	0
	Auburn	3.7	0	0	0	0
	Corridor Total	**12.3**	**99 feet**	**1 - 3 feet**	**11 - 17 feet**	**17 - 25 feet**
Bus Transit Routes	Renton	17.4	0.5	0	0	0
	Tukwila	17.2	0.6	0.2 - 0.3	0.2 - 0.3	0.2 - 0.3
	SeaTac	0	0	0	0	0
	Kent	58.0	6.6	0.7 - 1.0	0.6 -1.0	0.6 -1.0
	Uninc. King County	1.6	0.1	0.2 - 0.3	0.2 - 0.3	0.1 - 0.2
	Auburn	24.4	.5	0.7 - 1.1	0.7 - 1.1	0.5 - 0.7
	Corridor Total	**118.7**	**8.4**	**1.8 – 2.7**	**1.8 – 2.7**	**1.5 – 2.3**
Roadways	Renton	43.2	4.2	0.4 - 0.6	0.4 - 0.6	0.4 - 0.6
	Tukwila	31.9	2.4	0.8 - 1.1	0.8 - 1.2	0.8 - 1.2
	SeaTac	497 feet	250 feet	331 - 496 feet	271 - 407 feet	271 - 407 feet
	Kent	160.6	50.1	6.6 - 10.0	6.0 - 9.0	6.0 - 9.0
	Uninc. King County	13.1	6.0	4.9 - 7.4	5.2 - 7.8	5.2 - 7.8
	Auburn	102.0	13.5	6.8 - 10.3	7.0 - 10.5	7.0 - 10.5
	Corridor Total	**350.9**	**76.3**	**19.6 - 29.4**	**19.5 - 29.2**	**19.5 - 29.2**

Source: Parametrix, 2022

2.2.9 Community Economic Development

Community economic development includes programs that support small and local ownership of assets, including homes and businesses, and assures fair access for all to business development and business retention opportunities. While the alternatives would not be expected to impact any programs of this nature directly, residual inundation could cause flooding damage faced by home and business owners. The best proxy measure of these potential impacts can be found in Section 2.2.3 Jobs and Job Training and Section 2.2.11 Housing.

2.2.10 Neighborhoods

Neighborhoods support all communities and individuals through strong social networks, trust among neighbors, and the ability to work together to achieve common goals that improve the quality of life for everyone in the neighborhood. Religious institutions, community centers, and libraries are key gathering spaces that support the well-being of the communities they serve. There are 78 religious institutions located in the Lower Green River Corridor, a majority of which are located in Kent (42) and Auburn (27) with the remainder located in Renton (6) and Tukwila (3). Additionally, there are six community centers in the Lower Green River Corridor, four are located in Kent and two in Auburn. Finally, there are two public libraries in the Lower Green River Corridor, one in Tukwila and one in Kent.

2.2.10.1 Potential Equity-Related Impacts to Neighborhoods

Impacts of new and modified flood hazard management facilities

This analysis of impacts considered data about the location of three neighborhood facility types: religious institutions, community centers, and libraries. None of the alternatives would be expected to result in direct impacts to any of these neighborhood facilities in the Lower Green River Corridor.

Residual Inundation

Table 2-11 summarizes the number of neighborhood facilities that could be inundated by at least 1 foot in an 18,800 cfs flooding scenario by PSRC's Opportunity Index Level. All three of the alternatives show substantial improvements compared to existing conditions, and these improvements are most significant at the Low, Moderate, and High Opportunity Areas. Improvements could be identical under Alternative 1 and Alternative 2. Alternative 3 shows one additional facility at risk of inundation in the High Opportunity Area.

While the alternatives show improvements over the existing condition, Alternative 1 and Alternative 2 could still result in the inundation of up to one facility in the Low Opportunity Area, one facility in the Moderate Opportunity Area, four facilities in the High Opportunity Area, and two in the Very High Opportunity Area. Alterative 3 could have similar impacts with several additional facilities impacted in the High Opportunity Area.

Table 2-11. Neighborhood Facilities by PSRC Opportunity Index Level and Residual Inundation Status in Inundated >=1 Foot at the 18,800 cfs Scenario

	Very Low	Low	Moderate	High	Very High
Total Facilities in Corridor	**1**	**35**	**21**	**25**	**4**
Facilities Inundated by >= 1 foot in the 18,800 cfs Scenario					
Existing Conditions	0	18-26	1-2	8-12	1-2
Alternative 1	0	0-1	0-1	2-4	1-2
Alternative 2	0	0-1	0-1	2-4	1-2
Alternative 3	0	0-1	0-1	5-6	1-2

Note: Inundation modeling based on an 18,800 cubic feet per second flood event.

Source: KC Assessor, 2020; Parametrix, 2022; BERK, 2022.

2.2.11 Housing

The ability of King County residents to thrive is dependent, in large part, upon the availability of housing that is safe, healthy, and affordable. County-wide, people of color, particularly those who are Black, Hispanic, and/or Indigenous, are much more likely to be housing-cost-burdened, live in crowded homes,

and/or be renters compared to White residents (PolicyMap, 2022). These are all potential indicators of housing insecurity.

Within the Lower Green River Corridor, there are over 19,000 total housing units, and these units are typically lower cost compared to the conditions in the remainder of the county.[9] Therefore, Lower Green River Corridor plays an important role in providing relatively affordable housing for community members who may not be able to afford living in other parts of the county. About three-fourths of all units are in multi-family structures, such as apartment buildings. Mobile home parks in Auburn and Kent account for over 1,100 units, and they typically provide somewhat lower-cost housing options. As shown in Figure 1-2, nearly half of the housing units in the Lower Green River Corridor are located in Census tracts with Low or Very Low Opportunity Index Levels, according to PSRC. Residents in these areas have access to fewer resources that promote positive life outcomes compared to residents in other Census tracts.

2.2.11.1 Potential Equity-Related Impacts to Housing

Impacts of new and modified flood hazard management facilities

Under each of the alternatives, the District would design and build flood hazard management facilities with the goal of protecting and not isolating housing and neighborhoods throughout the Lower Green River Corridor. Additionally, the District would protect housing and community facilities used by historically disadvantaged populations (low-income and people of color). The manner of protection from impacts due to the development of new or improved facilities would vary by alternative. It could range from siting facilities to avoid impacts in the first place to acquiring residential properties and compensating owners for relocation.

New, improved, or relocated flood hazard management facilities expected in Alternatives 1 and 2 could directly impact between 40 and 60 housing units. Alternative 3 could impact 40 to 70 housing units. In all three alternatives, these housing units would be located in areas with Low or Moderate Opportunity Index Levels, according to PSRC, with the majority in Low Opportunity Areas. These impacts could have the potential to be highly disruptive to the lives of vulnerable community members. Additional outreach would be required to assess what kinds of housing could be impacted, who lives in those units, and what kinds of mitigation could be most appropriate.

Residual Inundation

Table 2-12 summarizes the percentage of housing units that could be inundated by at least 1 foot in an 18,800 cfs flooding scenario by PSRC's Opportunity Index Level. All three of the alternatives would show substantial improvements compared to existing conditions, and these improvements could be most significant in Very Low and Low Opportunity Areas. For instance, under existing conditions 97 percent of homes in Very Low Opportunity Areas could experience inundation, compared to 0 percent in all three alternatives. On the other hand, the 229 housing units in Very High Opportunity Areas could be inundated in all scenarios.

Among the other opportunity levels, there could be some variation between alternatives. Under Alternative 3, a slightly higher percentage of homes in Low Opportunity Areas could experience residual inundation, as well as a somewhat lower percentage of homes in the Moderate Opportunity Areas experiencing inundation.

[9] In 2020, average market rents for homes in the Lower Green River Corridor were $1,348 compared to $1,890 county-wide, a 40 percent difference. Likewise, the median value single-family home in the Lower Green River Corridor is $297,000, less than half of the $600,000 median value residence in King County, according to the King County Assessor.

Table 2-12. Housing Units by PSRC Opportunity Index Level and Inundation Status in Inundated >=1 Foot at the 18,800 cfs Scenario

	Very Low	Low	Moderate	High	Very High
Total Units in Corridor	**1,082**	**8,191**	**5,318**	**4,566**	**229**
Percentage of Units Inundated by >= 1 foot in the 18,800 cfs Scenario					
Existing Conditions	97%	77%	40%	53%	100%
Alternative 1	0%	13%	32%	23%	100%
Alternative 2	0%	15%	32%	23%	100%
Alternative 3	0%	17%	26%	23%	100%

Note: Inundation modeling based on an 18,800 cfs flood event.
Sources: King County Assessor, 2020; Parametrix, 2022; BERK, 2022.

Among the homes that could be inundated in all three alternatives would be three apartment buildings in Auburn or Kent. Collectively these structures include several hundreds of units of subsidized affordable rental housing. For each of the properties, the flooding depth in all three alternatives could be greater than 4 feet. At this depth, flood proofing could be infeasible. Loss of these building to flooding damage could displace hundreds of vulnerable families who would have extreme difficulty finding similar affordable housing in the area due to a critical lack of supply.

Residual flooding could also have the potential to impact homes that would not be expected to experience direct inundation. This could happen when all local roadways to access the homes would be flooded by greater than 1 foot. In Alternatives 1 and 2, residual inundation could cause between 300 and 400 homes to lose access in an 18,800 cfs flood event. Most of these homes would be in areas with Moderate Opportunity Index Levels according to PSRC. Under Alternative 3, a slightly higher number of homes in Moderate Opportunity Areas could experience access problems during flooding events.

2.2.12 Community and Public Safety

Community and public safety services, such as fire/emergency medical services (EMS) and police, that are responsive to all residents enable people to feel safe to live, work and play in King County neighborhoods. These safety services are dispatched from fire and police stations located throughout the Lower Green River Corridor. Five fire stations (two in Kent and one each in Renton, Tukwila, and Auburn) and four police stations (three in Kent and one in Auburn) are located in the Lower Green River Corridor. Flooding could potentially hinder the operation of these facilities when the community needs them most.

2.2.12.1 Potential Equity-Related Impacts

Impacts of new and modified flood hazard management facilities

No impacts of new, improved, or relocated flood hazard management facilities would be expected to affect police or fire stations in the Lower Green River Corridor.

Residual Inundation

With existing conditions in an 18,800 cfs flood event, fire stations in Kent (2) and Renton (1) could be impacted by at least 1 foot of inundation. Both of Kent's impacted fire stations are in Low Opportunity Areas where impacts to the level of service could be felt by disadvantaged communities. Inundation would also impact two police stations in Kent, one of which is in a Low Opportunity Area. No hospitals in the Lower Green River Corridor would be at risk of inundation under this flood event scenario. Each of the alternatives would prevent inundation of 1 foot or more from impacting any fire stations or police stations in the Lower Green River Corridor.

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Attachment A:
Equity and Social Justice Methodology

ATTACHMENT A: EQUITY AND SOCIAL JUSTICE METHODOLOGY

Introduction

The purpose of this document is to describe the approach and methods that will be used to assess equity and social justice (ESJ) implications of impacts identified in the Lower Green River Corridor Flood Hazard Management Plan (Plan) programmatic environmental impact statement (PEIS). The methods will inform the appropriate level of evaluation for a PEIS. A PEIS addresses non-project actions such as the adoption of the Plan. The level of detail is broader and is areawide in nature compared to a project EIS.

Definitions

In this work, **equity** is defined as "the full and equal access to opportunities, power and resources so that all people achieve their full potential and thrive."[10] Conditions that undermine equity also undermine social justice. When assessing equity and social justice, it is useful to differentiate between three different kinds of equity, each of which will be considered in this analysis:[11]

Distributional Equity refers to the fair and just distribution of benefits and burdens to all affected parties across the community.

Process Equity refers to inclusive, open, and fair access by all stakeholders to decision processes that impact community outcomes. Process equity relies on all affected parties having access to and meaningful experience with civic engagement, public participation, and jurisdictional listening.

Cross-generational Equity refers to effects of current actions on the fair and just distribution of benefits and burdens to future generations of communities.

Approach

This methodology incorporates several frameworks for evaluating and measuring access to resources and opportunities that promote equity of outcomes (see Community Outreach and Engagement Best Practices for Equity and Social Justice, Appendix D). It identifies 13 Determinants of Equity (Determinants) that shape opportunities to thrive as developed by King County's Office of Equity and Social Justice.[12] A description of each Determinant is included in the matrix at the end of this approach. Other examples of equity frameworks may be referenced as the work is accomplished, but they would likely be organized under these determinants since this proposal occurs within King County.

We will begin by assessing baseline disparities in access to Determinants within different parts of the Lower Green River Corridor (corridor) when compared to the remainder of King County. Then we will assess potential impacts to these Determinants within both the built and natural environment. This assessment will consider whether adverse impacts are disproportionately experienced by the most

[10] King County Equity and Social Justice Strategic Plan, p. 17 at https://aqua.kingcounty.gov/dnrp/library/dnrp-directors-office/equity-social-justice/201609-ESJ-SP-INT-ToC-Strat-VAL.pdf.

[11] Definitions adapted from those in King County 2015 Equity Impact Review Process Overview at https://www.kingcounty.gov/~/media/elected/executive/equity-social-justice/2016/The_Equity_Impact_Review_checklist_Mar2016.ashx?la=en.

[12] See "The Determinants of Equity Identifying Indicators to Establish a Baseline of Equity in King County" at https://www.kingcounty.gov/elected/executive/~/media/4FF27039534048F9BC15B2A0FFDDE881.ashx?la=en

vulnerable residents and whether potential benefits could support pro-equity outcomes that would begin to address historic patterns of inequity.

The 13 Determinants, described below, cut across traditional disciplinary topics covered in a PEIS. Therefore, much of the work to develop an ESJ report will involve synthesis of findings from other disciplines and an assessment of the cumulative implications for efforts to promote equity within the corridor and King County as a whole. This work also includes supplementing the discipline-specific findings, as needed, with additional quantitative and qualitative analyses.

To provide comprehensive descriptions of how topics related to ESJ will be addressed, this methodology repeats or overlaps some information provided in the built environment methodologies. This is not intended to indicate that there will be any duplicative analysis. Rather any overlapping analysis will be conducted to support both discipline-specific findings, as well as synthesized ESJ findings.

The methodology is divided in three parts that are described in the Methodology Section below:

- Identify vulnerable and disadvantaged populations.
- Assess affected environment and determinants of equity.
- Analyze direct, indirect, and cumulative impacts to equity and social justice.

Role of Community Engagement

Required Community Outreach under SEPA

The State Environmental Policy Act (SEPA) requires public outreach and engagement at two key points during the development of a PEIS. The two points are as follows:

1. At scoping (completed for this project in May 2019), the lead agency must accept written comments for at least 21 days. The lead agency must notify the public that there is a comment period to ensure that agencies with jurisdiction, affected Tribes, and concerned citizens know about the proposal and have an opportunity to participate in the environmental analysis and review.
2. At issuance of a draft PEIS, the lead agency must accept written comments for at least 30 days. Anyone may request a 15-day comment period extension before the end of the 30-day comment period. If 50 people or 2 agencies with jurisdiction request a hearing, the lead agency must also hold a hearing.

While SEPA only requires these minimal public notice efforts, SEPA encourages additional means of public involvement, comment, and discussion. SEPA especially recommends supplemental efforts for important or controversial proposals, regardless of environmental significance, and engaging affected community members who may not be reached by more traditional methods.

Planned Community Engagement

Each of the three parts of this methodology will rely, in part, on direct community engagement that will go beyond the minimal requirements under SEPA. This heightened level of engagement will be necessary to adequately analyze equity and social justice impacts. We will supplement quantitative analysis with local knowledge about conditions in the corridor, residents who have heightened vulnerabilities to the potential impacts of flooding, and community assets that support determinants of equity. This section provides an overview of the general approach to community engagement that will take place over the course of the study period.

We will begin by reviewing the Public Involvement Plan (PIP) developed by the larger PEIS team. The PIP will include a stakeholder list, demographic information about residents in the corridor, disparities compared to the remainder of the county population, and preliminary recommendations for inclusive outreach. Based on PIP recommendations and best practices for community outreach and engagement related to ESJ (see Attachment B) we developed the following general plan for community engagement.

1. **Conduct one-on-one interviews** with key community leaders of priority communities identified from the existing list of stakeholders. Interviews should confirm and expand existing knowledge, and they will include a review of maps of key locations within the corridor. These interviews will be coordinated with a concurrent series of interviews Cascadia Consulting Group is conducting with stakeholders, including members and leaders of Tribes and Tribal interests. The next section includes questions to guide these conversations.
2. **Collaborate with community leaders** who can serve as liaisons to priority communities. Compensate leaders for their time and expertise. The King County Equity and Social Justice Strategic Plan for 2016-2022 (King County 2022). [13] notes the challenge of relying on community-based organizations without compensation for their time and expertise[14] and without investment in those organizations to increase their capacity.
3. **As guided by community leaders, gather broader community input** through focus groups or town hall meetings. Host these events at existing, well-known locations that are regularly used by priority communities. Another method will be to attend existing community events to gather community input. Review maps of key locations within the corridor for accuracy and potential omissions.
4. **Additional outreach and engagement should reflect input received** in initial one-on-one interviews with community leaders and other community conversations. Next steps cannot be identified until this initial engagement has taken place.

METHODOLOGY

Identify Disadvantaged Populations (Priority Communities)

In this task, we will conduct quantitative analysis and direct community engagement to identify and estimate populations experiencing disadvantages and inequities compared to the remainder of King County. We will share similarities or differences to population as a whole to inform engagement and mitigation alternatives. These populations are more likely to lack the social and financial resources that can support resiliency in the aftermath of a flooding event. To identify these populations, we will review findings in the PIP related to demographic information about residents in the corridor and disparities compared to the remainder of the county population. We will supplement these findings with both quantitative and spatial analyses, as well community engagement.

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[13] See https://aqua.kingcounty.gov/dnrp/library/dnrp-directors-office/equity-social-justice/201609-ESJ-SP-6GAs.pdf.

[14] Agencies with similar policies include Seattle, Washington, and Portland, Oregon. For other planning processes in which BERK Consulting, Inc. has been involved, experts were compensated at an hourly rate similar to that of a consultant for phone interviews (e.g., one-hour interview). For another policy development process, BERK built compensation into the public engagement plan for attendees at events that were designed to attract people who do not usually participate. The compensation was gift cards of up to $20 (a project in Oregon and a project in Washington).

Quantitative and Spatial Analysis

We will summarize the latest available data available from the U.S. Census American Community Survey to estimate and map the location of residents with the following characteristics within the corridor:

- Low-income
- People of color (with breakdowns by race and ethnicity)
- Those with limited English proficiency
- Language spoken at home
- Elderly and disabled residents
- Renter households
- Cost-burdened households

To facilitate analysis of disparities relative to resources and impacts, we will also compare the area to an existing index (an index of disadvantage), such as the Displacement Risk Mapping work by PSRC (Puget Sound Regional Council 2020). If an appropriate index is not available, we will develop performance metrics vetted by the PEIS team and approved by the District.

Community Engagement

During this phase, we will reach out to community stakeholders and leaders with knowledge of the resident population to review information collected. We will ask questions such as the following:

- Does this summary of the corridor population look accurate? Have conditions on the ground changed significantly since data was collected?
- What vulnerable groups or communities are not reflected in these data? What information can you provide about these residents?
- How would your community like to be engaged in PEIS processes? What are the key barriers to participating, and how have you overcome them in the past?
    - Are there existing events at which we could gather community input?
    - Does your community have specific needs that would foster involvement? Examples could include transportation, daytime scheduling, childcare, and interpretation.

A final interview guide will be developed for review and approval by the District before community stakeholders and leaders are contacted. It is likely that we will also ask questions relevant to vulnerabilities, Determinants, and the affected environment at this stage. These are described in the following section.

Assess Affected Environment

We will use the Determinants framework to describe and summarize current social and natural resources (or the lack thereof) that support access to opportunity among disadvantaged populations living or working in the corridor. Table D.1 describes each Determinant and the data sources we will use to summarize relevant assets and conditions. Additionally, we will map PSRC's Opportunity Index to identify Census tracts within the Lower Green River Corridor that contain greater or lesser resources that promote positive life outcomes. Our analysis will highlight potential impacts or benefits to Determinants within lower opportunity tracts.

Community Engagement

The goal of engagement is to collect information about community and social resources that may be at risk and are difficult to identify through traditional data sources. We expect to ask the questions listed below of community leaders, service providers, or other relevant stakeholders among affected disadvantaged communities. The final questions will be reviewed and approved by the King County Flood Control District (District).

- Within the corridor, what are the most important cultural spaces, businesses, places of worship, or community hubs for your community?
  - Please take a moment to review our maps of social resources in the corridor. Are the maps accurate? Is anything missing?
  - Are there places of cultural or historical significance for your community in the corridor?
- How do community members access services in the corridor?
- What should we know that we haven't asked about?

Analyze Impacts

As with the affected environment, the impact analysis will also follow the Determinants of Equity Framework, as shown in Table 4-1. However, the analysis will also consider and summarize disparities among those who are impacted and those who would benefit from the alternative, including the severity of the impact on disadvantaged populations. To analyze cumulative impacts, we will evaluate whether the alternative would support or would undermine greater equity of opportunity among disadvantaged populations living in the corridor.

Methodology Matrix

This matrix summarizes each Determinant of Equity and the sources of data for analysis.

Table A-1. ESJ Methodology Organized by "Determinants of Equity"

Determinant of Equity	Brief Description[15]	Affected Environment Analysis (See Approach for details)	Impact Analysis (See Approach for details)
Early Childhood Development	Early childhood development that supports nurturing relationships, high quality, affordable childcare, and early learning opportunities that promote optimal early childhood development and school readiness for all children	**Quantitative:** • Location of childcare facilities (KC Assessor) • Location of King County facilities for child and youth development services (Child Care Resources) • Location of all youth program facilities (Schools Out Washington) **Qualitative data from community engagement:** • Resources and facilities not tracked in available data sources • Whether vulnerable or disadvantaged community members rely on these resources • Barriers to (and opportunities for) access	**Direct**: • Number of facilities or resources directly impacted by proposed flood facilities, including likely demolition or changes to level of access • Facilities or resources that may be inundated under future flood conditions **Indirect**: • Facilities or resources that may have access challenges under future flood conditions
Education	Education that is high quality and culturally appropriate and allows each student to reach his or her full learning and career potential	**Quantitative:** • School locations (OSPI) • Current student enrollment and projected enrollment (OSPI) **Qualitative data from community engagement:** • Resources and facilities not tracked in available data sources, including tribal run facilities and programs • Whether vulnerable or disadvantaged community members rely on these resources • Barriers to (and opportunities for) access	**Direct:** • Impact of proposed flood facilities on schools (e.g., use or operation of schools) • Future flood conditions and alteration of school operations **Indirect:** • Change to school access routes as a result of changes to roads, affecting school service area boundaries or safety

[15] Adapted from King County Office of Equity and Social Justice

Table A-1. ESJ Methodology Organized by "Determinants of Equity" (continued)

Determinant of Equity	Brief Description[15]	Affected Environment Analysis (See Approach for details)	Impact Analysis (See Approach for details)
Jobs and Job Training	Jobs and job training that provide all residents with the knowledge and skills to compete in a diverse workforce and with the ability to make enough income for the purchase of basic necessities to support them and their families	**Quantitative**: • Total baseline jobs, by sector and wage level (Census LEHD) • Forecasted employment by sector and transportation analysis zone (PSRC Land Use Vision) • Job training resources and services (Workforce Development Council of Seattle-King County) **Qualitative data from community engagement:** • Employment opportunities not tracked in available data sources • Resources and facilities not tracked in available data sources • Barriers to (and opportunities for) access • Whether vulnerable or disadvantaged community members rely on these resources	**Direct**: • Number of jobs in locations impacted by proposed flood facilities, including likely demolition • Number of jobs in locations that may be inundated under future flood conditions • Job training resources and services impacted by proposed flood facilities, including likely demolition • Job training resources and services that may be inundated under future flood conditions **Indirect**: • Number of jobs or job training resources in locations that may have access challenges under future flood conditions
Health and Human Services	Health and human services that are high quality, affordable and culturally appropriate and support the optimal well-being of all people	**Quantitative**: • Location of King County facilities for health and human services (KC DCHS) • Location of hospitals, medical facilities, and public health clinics (KCPH) **Qualitative data from community engagement:** • Resources and facilities not tracked in available data sources • Barriers to (and opportunities for) access • Whether vulnerable or disadvantaged community members rely on these resources	**Direct**: • Number of facilities or resources directly impacted by proposed flood facilities, including likely demolition • Facilities or resources that may be inundated under future flood conditions **Indirect**: • Facilities or resources that could have access challenges under future flood conditions

Table A-1. ESJ Methodology Organized by "Determinants of Equity" (continued)

Determinant of Equity	Brief Description[15]	Affected Environment Analysis (See Approach for details)	Impact Analysis (See Approach for details)
Food Systems	Food systems that support local food production and provide access to affordable, healthy, and culturally appropriate foods for all people	**Quantitative**: • Locations of grocery stores (KC Assessor) • Location of farmers markets on farms, and community farmer's markets (King County and website research) • Food Banks • Number and types of farms in study area, including farms with food bank donations or field gleaning. This includes King County owned farms related to the County's ESJ and Local Food Initiative. **Qualitative data from community engagement:** • Access to affordable or good-quality fresh food • Resources and facilities not tracked in available data sources • Barriers to (and opportunities for) access • Whether vulnerable or disadvantaged community members rely on these resources	**Direct**: • Number of facilities or resources directly impacted by proposed flood facilities, including likely demolition • Facilities or resources that may be inundated under future flood conditions **Indirect**: • Facilities or resources that could have access challenges under future flood conditions
Parks and Natural Resources	Parks and natural resources that provide access for all people to safe, clean, and quality outdoor spaces. Facilities, and activities that appeal to the interest of all communities. Conservation Futures Program Recreation Conservation Office (RCO) Grant Program	**Quantitative:** • Acres of parkland and miles of trail in corridor (King County) • Population per acre and per mile existing and projected • King County Recorder Records search of municipal park properties acquired with funding that require mitigation if impacted (e.g., RCO or Conservation Futures) **Qualitative data:** • Planned investments in parks and trails (summary tables based on plans) • Resources and facilities not tracked in available data sources • Barriers to (and opportunities for) access • Whether vulnerable or disadvantaged community members rely on these resources	**Direct:** • Potential loss or creation of parkland or trails due to proposed flood facilities • Potential loss or creation of parkland or trials acquired with state or local funds requiring mitigation • Opportunities for access or recreation as part of recreation mitigation associated with flood facilities • Opportunities to expand contiguous trail systems • Potential changes to maintenance frequency or practices due to future flood events **Indirect:** • Potential changes in access to parks and recreational facilities

Table A-1. ESJ Methodology Organized by "Determinants of Equity" (continued)

Determinant of Equity	Brief Description[15]	Affected Environment Analysis (See Approach for details)	Impact Analysis (See Approach for details)
Built and Natural Environment	Healthy built and natural environments for all people that include mixes of land use that support jobs, housing, amenities, and services; trees and forest canopy; clean air, water, soil, and sediment	**Quantitative:** • Percent tree cover • Sidewalk coverage • Air quality • Water quality • Aesthetics • Access to the waterway, including for use in traditional cultural practices **Qualitative data from community engagement:** • Local barriers to (and opportunities for) environmental health, including preparedness for flood emergencies • Current and historic uses of the river and floodplain for traditional cultural practices • Current barriers to use of the river for traditional cultural practices	**Direct**: • Potential loss of tree canopy due to proposed flood facilities • Opportunities to increase tree canopy associated with proposed flood facilities • Potential loss of sidewalk coverage or pedestrian routes due to proposed flood facilities • Opportunities to increase pedestrian routes associated with proposed flood facilities **Indirect:** • Potential changes to Lower Green River water quality • Potential changes to access to the Lower Green River
Transportation	Transportation that provides everyone with safe, efficient, affordable, convenient, and reliable mobility options, including public transit, walking, carpooling, and biking	**Quantitative:** • Existing bus routes, ridership, and park-n-ride use as available from transit agencies • Existing Sounder operations and ridership as available from Sound Transit • Rail lines (freight, short, passenger) • Rail passenger/freight trips counts, if available • Bike routes • Sidewalk coverage **Qualitative data from community engagement:** • Quality and reliability of transit service • Barriers to (and opportunities for) access	**Direct:** • Impact of proposed flood facilities on movement and circulation of people • Transportation facilities that may be inundated under future flood conditions **Indirect**: • Facilities or resources that could have access challenges under future flood conditions

Table A-1. ESJ Methodology Organized by "Determinants of Equity" (continued)

Determinant of Equity	Brief Description[15]	Affected Environment Analysis (See Approach for details)	Impact Analysis (See Approach for details)
Community Economic Development	Community economic development that supports small and local businesses, and assures fair access for all to business development and business retention opportunities	**Quantitative**: • Business locations • Commercial/Industrial land use improvement value on parcels (KC Assessor) **Qualitative data from community engagement:** • Identification of small and local businesses that serve people of color, low-income residents, elderly persons, and those with limited English-speaking proficiency • Unpublished economic development plans and potential impacts of alternatives • Culturally significant businesses • Informal economic activity in study area not reflected in data	**Direct**: • Number of businesses or residences in buildings impacted by proposed flood facilities, including likely demolition • Total value of commercial/industrial improvements on parcels impacted by proposed flood facilities, including likely demolition • Number of businesses or residences in locations that may be inundated under future flood conditions • Total value of commercial/industrial improvements in locations that may be inundated under future flood conditions **Indirect**: • Number of businesses or residences in locations that may have access challenges under future flood conditions • Total value of commercial/industrial improvements in locations that may have access challenges under future flood conditions
Neighborhoods	Neighborhoods that support all communities and individuals through strong social networks, trust among neighbors, and the ability to work together to achieve common goals that improve the quality of life for everyone in the neighborhood	**Quantitative**: • Location of community assets that support community gathering (religious institutions, community centers, libraries, etc.) • Description of user population size and demographics for some places of worship **Qualitative data from community engagement:** • Location of culturally significant businesses or anchor institutions	**Direct**: • Number of facilities or resources directly impacted by proposed flood facilities, including likely demolition • Facilities or resources that may be inundated under future flood conditions **Indirect**: • Facilities or resources that could have access challenges under future flood conditions

Table A-1. ESJ Methodology Organized by "Determinants of Equity" (continued)

Determinant of Equity	Brief Description[15]	Affected Environment Analysis (See Approach for details)	Impact Analysis (See Approach for details)
Housing	Housing for all people that is safe, affordable, high-quality, and healthy	**Quantitative**: • Housing units by type identified in parcel-level data (King County Assessor) • Income-restricted affordable housing units • Cost of housing (Costar, Zillow) **Qualitative data from community engagement:** • Presence of informal housing in study area (homeless camps, tiny home villages, mobile homes, etc.)	**Direct**: • Number of baseline housing units (by type) directly impacted by proposed flood facilities, including likely demolition • Baseline housing units (by type) that may be inundated under future flood conditions **Indirect**: • Baseline housing units (by type) with potential access problems under future flood conditions
Community and Public Safety	Community and public safety that includes services such as fire, police, emergency medical services, and code enforcement that are responsive to all residents so that everyone feels safe to live, work and play in any neighborhood of King County	**Quantitative:** • Fire Station location and equipment • Population per fire station – existing and planned • Response time objectives and results • Calls for service • location of hazardous materials • Summary of service provider emergency management plans, if any **Qualitative:** • Summary of service provider emergency management plans, if any • Challenges residents had faced receiving emergency services during past natural disasters (e.g., snowstorms, Nisqually Earthquake, etc.)	**Direct:** • Impact of proposed flood facilities on fire stations and equipment (e.g., use or access of stations) • Impact on response times based on changes to roads as a result of flood facilities (qualitative and based on transportation analysis) **Indirect:** • Change in types or numbers of calls for service related to flooding compared to current conditions or emergency service plans • Future flood conditions and effects on fire services distribution of facilities or staffing
Law and Justice	A law and justice system that provides equitable access and fair treatment for all	*Unrelated to proposed alternatives. Not addressed.*	

* For all impacts, this analysis will examine disparities with regards to who benefits and who is negatively impacted by the alternative.

Attachment B:
Community Outreach and Engagement Best Practices for Equity and Social Justice

ATTACHMENT B: COMMUNITY OUTREACH AND ENGAGEMENT BEST PRACTICES FOR EQUITY AND SOCIAL JUSTICE

Introduction

Effective community outreach and engagement requires an intentional, equitable approach. Engagement that draws input from all voices, including from traditionally underrepresented communities, leads to better decision-making processes and more innovative outcomes.

Conducting equitable outreach and engagement presents additional challenges, as it can be difficult to meaningfully engage communities that have been traditionally underrepresented in civic decision-making. These challenges can result from factors including language or literacy barriers and mistrust of government processes due to historical exclusion.

Extensive literature provides guidance and frameworks for conducting equitable outreach and engagement. This document draws from the existing body of work to define key terms and summarize best practices.

Definitions

The following terms and definitions come from King County's Equity and Social Justice Strategic Plan and the King County Equity Impact Review Process Overview.

Cross-generational equity: Effects of current actions on the fair and just distribution of benefits and burdens to future generations of communities and employees. Examples include income and wealth, health outcomes, White privilege, resource depletion, climate change and pollution, real estate redlining practices, and species extinction.

Determinants of equity: The social, economic, geographic, political, and physical environments and conditions in which people live. Full and equal access to the determinants of equity is necessary to have equity for all people regardless of race, class, gender, language spoken, and geography.

Distributional equity: Fair and just distribution of benefits and burdens to all affected parties and communities across the community and organizational landscape.

Equity: A system of fairness. Equity is the full and equal access to opportunities, power, and resources so that all people achieve their full potential and thrive. Equity is an ardent journey toward well-being as defined by those most negatively affected.

Inequities: Differences in well-being that disadvantage an individual or group in favor of another. Inequities are caused by past and current decisions, systems of power and privilege, policies, and implementation of those policies.

Process equity: Inclusive, open, and fair access by all stakeholders to decision processes that impact community and operational outcomes. Process equity relies on all affected parties having access to, and meaningful experience with, civic and employee engagement, public participation, and jurisdictional listening.

Race in the U.S.: Race and racial categories in the United States are social constructions created by the dominant group with the intent to determine dominant and subordinate categories and access to resources. They have an assigned meaning. Racial categories have changed over time; thus, how various communities experience race has changed over time.

Social justice: All aspects of justice, including legal, political, economic, and environmental factors. Social justice requires the fair distribution of, and access to, public goods, institutional resources, and life opportunities for all people.

Structural racism: The interplay of policies, practices, programs, and systems of multiple institutions that leads to adverse outcomes and conditions for communities of color compared to White communities. Structural racism occurs within the context of racialized historical and cultural conditions.

Best Practices

- **Rely on existing resources and toolkits.** Over the past decade, many institutions have conducted extensive research on effective practices for equitable outreach and engagement. This document draws heavily from this research. Several institutions have also developed checklists and self-evaluation tools that complement this document, including the following:
  - **King County:** Equity Impact Review Process Overview includes a process and checklist for identifying and assessing potential equity impacts of a proposed action.
  - Sustainable Communities Initiative: The Community Engagement Guide for Sustainable Communities **outlines dozens of specific tactics to implement several engagement strategies.**
  - **Urban Sustainability Directors Network:** Learning and Evaluation Tool: Assessing the Process from Community Engagement to Ownership provides a tool for self-evaluating engagement work to improve the level of community ownership, an essential aspect of equity.
- **Set internal expectations for timeline and allocate adequate resources.** As the city of Seattle's Department of Neighborhoods' Strategies for Equitable Engagement describes, "equitable engagement requires work" (City of Seattle N.D.). Engagement work that proactively addresses societal inequities typically has higher costs in time and resources than traditional outreach tactics. The most effective engagement is not always efficient, and it often requires iterative work to produce desired results.
- **Grapple with, acknowledge, and respond to past failings and historical injustices.** In its resource guide on "Advancing Racial Equity and Transforming Government," the Government Alliance on Race and Equity explains that "racial inequities are not random —they have been created and sustained over time. Inequities will not disappear on their own" (Nelson, Spokane, Ross, & Deng 2015). Learning about and responding to historical context can reveal key areas and opportunities for equity-focused engagement.
- **Rely on data to identify key communities to engage, to set goals, and to measure progress.** This includes analyzing existing data to establish a baseline and understand the context of the engagement plan, as well as collecting new data specific to the impact of the engagement process. Data-based goals can allow for internal accountability.

- **Based on input from trusted community leaders, tailor the engagement plan to the specific barriers and needs of communities impacted by the project.** Examples include the following:
  - *Accessible location.* Locate events in spaces with public transit access to ensure that people from lower-income communities can participate.
  - *Accessible scheduling.* Offer engagement opportunities at a wide range of times and locations to accommodate community members' work and family schedules. Avoid overlapping events with cultural holidays.
  - *Accessible communications.* Include visual communications to reach people with limited literacy or English language proficiency. Collaborate with ethnic media. Offer translation of documents and events into key languages and American Sign Language. Provide accessible online materials for blind or visually impaired persons.
- **Work with existing community organizations over the long term to build trust-based relationships**. PSRC's Planning for Whole Communities Toolkit explains that "partnerships with community-based organizations can increase depth and reach of engagement," and "transparent decision making and feedback to community members can build trust and improve future engagement" (Puget Sound Regional Council 2014). To further establish trust and transparency, share information openly and create clear opportunities for engagement.
- **Leverage local knowledge within communities to deepen an understanding of potential impacts and to guide decision-making processes.** As the Sustainable Communities Initiative's community engagement guide explains, "participation and engagement processes tend to rely on the knowledge of technical experts without fully utilizing the inherent value of local resident knowledge and expertise for solving problems" (Bergstrom, Rose, Olinger, & Holley 2012). Begin the engagement process with humility and by listening to issues of community concern.

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