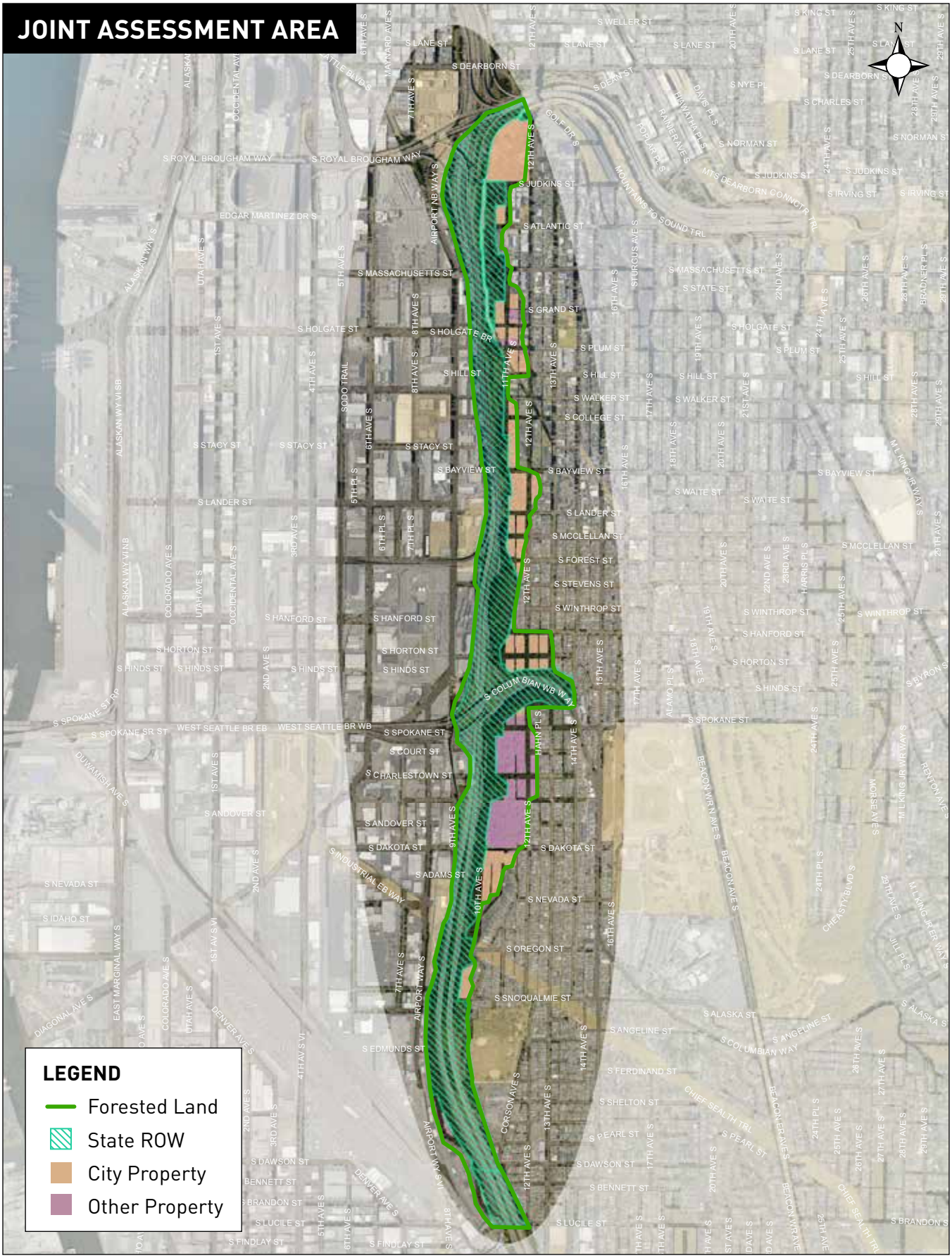
I-5 and East Duwamish Greenbelt

CONDITIONS ASSESSMENT

February 17, 2016

King County

City of Seattle


JOINT ASSESSMENT AREA
N
LEGEND
Forested Land
State ROW
City Property
Other Property

BACKGROUND

On January 26, 2016, Jeannine Zapata and James Q. Tran were shot to death and three other victims were critically wounded at a homeless encampment under I-5 in an area commonly known as "the Jungle." Six days later, three teenagers were arrested for the shootings at another homeless encampment under an on-ramp to I-90, several blocks away.

The night of the murders, Governor Jay Inslee, King County Executive Dow Constantine, and Mayor Ed Murray agreed to conduct a joint assessment of the health and safety conditions of the area, encompassing approximately 150 acres running under and adjacent to I-5, from I-90 to South Lucile Street. The topography is very steeply sloped in some areas, and includes low

brush and wooded land on the very western edge of the I-5 structure, fairly open areas immediately under the interstate, and trails and wooded area to the east of the interstate.

The assessment was undertaken collaboratively by representatives from Washington State, King County, the City of Seattle, and non-profit organizations. The efforts were led by Seattle Fire Chief Harold D. Scoggins, and included staff from:

- Washington State Department of Transportation
- Washington State Patrol
- Washington State Department of Health
- Washington State Department of Corrections (contracted for solid waste removal)
- Public Health Seattle King County
- Seattle Department of Transportation
- Seattle Department of Parks and Recreation
- Seattle Department of Human Services
- Seattle Police Department
- Seattle Fire Department
- Seattle Public Utilities
- Downtown Emergency Services Center (DESC)
- REACH
- Healthcare for the Homeless Network

The team conducted extensive walking tours of the northern section of the area on January 28, 2016 and returned on February 3, 2016 to complete the assessment of the southern half, located between South Forest and Lucile Streets.

The purpose of the assessment was to better understand the conditions in the area with attention to:

1. Human conditions
2. Health
3. Safety
4. Infrastructure
5. Environment

SUMMARY

Conditions within the assessment area present significant public health, fire, safety, structural, and environmental risks.

During the two-day conditions assessment, the group counted 201 tents and dwelling structures, and estimated that there were many more that were not immediately visible or that might only be present at night. Conditions in the area are extreme, and residents do not have clean water and bathroom facilities. Encampment residents have varied tenures in their campsites, with many residing there for multiple years. Some of the residents are very vulnerable and struggle with health and addiction issues. Simultaneously the area has a substantial amount of criminal activity, which is an especially precarious situation for these vulnerable residents.

The presence of open sewers, human waste, and hazardous materials throughout the area under the interstate is a threat not only to the residents of the encampments but to State maintenance crews, people travelling on the interstate, and first responders. The accumulated human and solid waste from several hundred campsites presents a serious health concern and creates conditions ripe for the spread of disease.

The Seattle Fire Department has responded to the assessment area over 750 times in the last five years, including 250 fires and over 500 emergency medical responses. Some of the fires were large burnouts that required the closure of portions of I-5 because smoke from the encampment areas obscured visibility on the decks of the freeway. The large accumulation of propane tanks and butane canisters at some campsites under the freeway poses a serious fire and safety hazards. In the dry summer months, fire could quickly spread up the wooded hillside to the residential community above.

In the past five years, Seattle Police have responded to over 70 violent incidents under and adjacent to the freeway in this area. Those incidents include homicides, shootings, stabbings, rape, robbery, aggravated assault, and domestic violence. The area is known for its lawlessness and frequently is host to drug dealing and property theft rings. Both the Department of Corrections and Seattle Police report that the area is a common hideout for individuals wanted on felony arrest warrants.

The dangerous and unsanitary conditions of the area under the freeway have significantly impaired WSDOT's ability to conduct regular inspections and maintenance of this section of the freeway – one of the busiest in the State. In particular, WSDOT is not able to get regular access to the underside of the expansion joints and freeway drainage systems. WSDOT reports that when its crews do enter the area, they are often threatened or intimidated by those living in the encampments. As a result, the assessment team witnessed numerous broken or clogged drainage pipes and pooling around some of the support columns.

Finally, the conditions in the area generate significant environmental contamination. For many decades now, upwards of hundreds of people have been living in this area without regular access to bathrooms or trash disposal. Because of the slope, much of the human waste ultimately enters the storm run-off systems that feed directly into the Duwamish Waterway. Likewise, the solid waste and chemical waste (e.g. butane canisters) are left in the open where the bacteria could ultimately leach into the groundwater or into the storm runoff system.

FINDINGS

1 Human Conditions

During the two days spent on site, the group counted a total of 201 tents or shelter structures. The team estimates that the total number of campsites likely exceeds that, as some may not be fully visible due to the brush and adjacent densely wooded areas. Additionally, some members of the assessment team returned to the outskirts of the area at night and noted that new tents had been set up in areas that were unoccupied during the daytime. The team believes that some residents may pack up their belongings during the day for security reasons, and so were not counted during the daytime visits.

The group was able to speak to several people each day but knows that a much more detailed understanding of the area's population is necessary to fully anticipate the type of shelter and supportive services that will best serve the residents. Based on the encampment conditions and the team's prior knowledge of the area,

shelter and service needs will likely vary quite a bit depending on each individual's:

- Family situation
- Financial and employment situation
- Physical and mental health condition
- Ability to access personal documentation such as state-issued identification
- Criminal record history
- Drug or alcohol dependence
- Tenure in the encampment
- Pets

Some residents of the area reported tenures of up to two years or more. Others had been there only a few weeks. In addition to extreme poverty, many of the area's encampment residents struggle with mental, behavioral, and physical health issues, as well as addiction and chronic substance abuse without access to treatment. The criminal activity in the area is particularly dangerous for the vulnerable populations living in the encampments, as these residents can easily become victims of crimes. There is evidence,

including with the recent shooting, that outside individuals often visit the greenbelt to engage in illegal activity that further endangers those living in the area.

Many outreach workers and service providers report that they do not go into the freeway and greenbelt area for safety reasons. This means that some residents are disconnected from the access they need to more permanent housing solutions, treatment, employment assistance, and health care, among other needs.

2 Health Conditions

At the time of the joint assessment visits, approximately 90 percent of the encampments were in the area immediately under the interstate, which has the advantage of being more protected from rain and mud. Team members who were familiar with the area indicated that the encampment locations change seasonally, with some people moving into the wooded areas adjacent to the interstate as the hillside becomes more accessible in dryer weather.

There were vast quantities of waste and trash under and adjacent to the interstate. Public health officials from the Washington State Department of Health and Public Health Seattle King County noted an accumulation of both human and solid waste throughout the assessment area. They also noted potential challenges with food storage safety. These issues create the potential for diseases and substantial public health risks for the resident population and the larger city.

HUMAN WASTE

With more than 200 campsites, and potentially more in areas not immediately obvious on the initial walkthrough, one of the most significant challenges is the lack of hand washing facilities and sanitary toilets. The area does not have running water or sewer infrastructure, and so waste disposal is handled in several different ways. Some campers had obvious areas and containment for defecation (buckets and homemade latrines), however there was no designated location where these toilets could

be emptied into a sanitary sewer. As a result most human waste appears to be dumped on the ground away from encampment sites. In some cases, however, feces and jars of urine lay in close proximity to living quarters. The team did document one pit toilet and urinal on the top of a steep slope.

There were limited provisions for wastewater surface runoff under the highway. In some areas water runoff flowed along the surface through piles of solid waste, leaching into runoff throughout the entire area. Additionally, because there is no running water, access to clean water is dependent on camper ability to self-haul for personal use.

According to Public Health Seattle King County and the Washington State Department of Health, the accumulation of large quantities of human waste in close proximity to tents and areas of human habitation presents a serious risk of the spread of disease. Simply by walking through the area, a resident is likely to have their shoes come into contact with human waste. Combined with the lack of running water for washing hands, there are potentially substantial health risks.

SOLID WASTE

Team members noted a significant amount of solid waste throughout the corridor. Much of this waste was not immediately adjacent to specific encampments, but was accumulated in the drainage areas and low brush under the freeway and in informally designated disposal sites. This included materials such as:

- Sharps (needles and needle caps)
- Butane and propane tanks
- Bagged miscellaneous trash
- Discarded bicycles
- Discarded blankets
- Human and animal food waste
- Discarded salvage materials from nearby industrial sites

The assessment team estimated several hundred tons of solid waste throughout the three-mile area. While some residents clearly made efforts to bag and store trash, high volumes of litter overwhelmed many of the encampment sites. The significant presence of used needles poses an increased risk of spreading blood borne pathogens among the residents, to first responders, and to crewmembers engaged in maintenance activities. In many areas, the solid and human waste were combined, making clean up a greater challenge.

FOOD STORAGE AND RODENT ACTIVITY

Food storage and handling were another significant health concern for the residents. Perishable food was observed stored inside tents and residents were not using containers to prevent rodent access. Because of the nearness of shelters to solid and human waste, rodent contamination is probable. The team noted signs of rodent activity, including burrows close to obvious shelters with sleeping arrangements in direct contact with the ground. Rats can spread disease if, for example, they come into contact with food that is later eaten by a human.

The southern section of the assessment area had fewer tents and residents were spread more widely apart. Many of the tent sites were not easily accessible by foot and required hiking steep slopes. In these locations, there was also significant rat harborage throughout, with English Ivy and blackberry bushes in abundance, and discarded materials such as clothing, blankets, tarps and broken down tents providing additional nesting materials.

3 Safety

CRIMINAL ENVIRONMENT

The assessment area has a well-deserved reputation for being lawless and violent, and unsafe for residents, visitors, and first responders. The Seattle Police Department has responded to over 70 violent incidents in the area over the past five years, including homicides, rapes, stabbings, robberies and aggravated assaults. In 2015, Seattle Police responded to 17 violent incidents, the highest total in the last decade. Many more crimes are unreported.

During the walkthrough, law enforcement officers on the assessment team from Washington State Patrol and the Seattle Police Department noted overt signs of criminal activity, including drug sales, collections of apparently stolen bikes and electronics equipment, and significant signs of drug use, particularly needles and needle caps.

Several factors contribute to the criminal environment of the area, including: the lack of police presence, the isolated nature of the camps, the lack of lighting, and the reputation of the area for criminal activity (which may attract those interested in crime). As a result, there is a high incidence of rape and sexual assault.

SAMPLE SIGNIFICANT VIOLENT INCIDENTS

Below is a sample of some of the significant incidents that Seattle Police, Washington State Patrol, and the Washington Department of Corrections have responded to in the I-5 and greenbelt area:

August 19, 2015 – Officers responded to report of a suspect attacking victims with a hatchet in the "Jungle area." The victims reported that they confronted the suspect about stealing goods located in their tent under I-5. That provoked a verbal altercation at which point the suspect brought out a hatchet and chased the victims before they escaped.

July 5, 2015 – Numerous officers responded to a call of assault in progress including stabbing underneath I-5 near Airport Way South and South Holgate Street. The victim had been stabbed multiple times after an altercation that stemmed from threats to the victim's wife. The suspect also had injuries and showed signs of mental illness.

June 26, 2015 – Washington State Patrol and Seattle Police responded to reports of a victim with a gunshot wound in the abdomen at I-90 and Dearborn Street. The victims reported that they spent the night under the freeway drinking and in the morning had an altercation with two suspects when one of the suspects shot at the victims, striking the first victim in the stomach. The other victim then dragged and carried the wounded man approximately one-half mile toward I-90 where he flagged down help.

October 29, 2014 – Officers responded to a report of a robbery in the "Jungle area" where the victim was bleeding heavily from six stab wounds. The victim reported that he lived in a homeless camp under the freeway and had been sitting at his campfire when two suspects approached with a gun and began to beat him and then slash him with a knife. The suspects rummaged through the victim's pockets looking for money before departing. The victim reported that the suspects were drug dealers who operate in the area.

September 30, 2014 – Seattle Police and Washington Department of Corrections officers were searching for a wanted burglary suspect with a felony warrant in the northern sections of the "Jungle area" near I-90. Officers contacted a grouping of eight tents and identified the warrant suspect and several others with outstanding felony warrants. Per the terms of parole, the warrant suspect's tent was searched. Officers found a scoped Winchester rifle, a stolen 9mm loaded pistol, and a used glass meth pipe.

July 23, 2014 – Officers responded to a report of a rape that occurred in the early morning hours in the "Jungle area." The victim had agreed to "party" with the suspect and they took a cab into the downtown area together to buy crack cocaine. They then walked into the Jungle area to smoke the narcotics. After smoking, the suspect pushed the victim to the ground and raped her.

July 20, 2014 – Officers responded to a report of a robbery under the freeway near Bayview Street. The victim reported that two suspects had beat him with a baseball bat and handgun before taking money from him. The victim suffered significant injuries to his face and head.

January 22, 2014 – Officers responded to an early morning call of an in-progress assault near the freeway area and Bayview Street. The victim reported that he had picked up his girlfriend in Tukwila and brought her to a camp under the freeway to "party." After arrival, an acquaintance of the girlfriend attacked the victim with a knife, cutting his face and hand.

August 30, 2013 – Officers responded to the King County Jail where an inmate reported that she had just seen the man that had raped her in the "Jungle area" and that he was now an inmate as well. The victim reported that the rape had occurred in her tent near the freeway approximately one month prior and that she had not reported it at the time out of fear. She reported that the suspect resided in a nearby tent and entered her tent late in the evening while under the influence of drugs or alcohol. The suspect beat her with his fists before raping her.

December 5, 2011 – Officers responded to Harborview Medical Center and met with the victim who reported that she had been attacked and possibly raped in her tent at an encampment near Airport Way South and the intersection of I-5 and I-90. She stated that she had asked a female friend to stay in her tent with her for protection and that they had locked the tent on the inside zipper. The suspect was known to the victims and forced his way into the tent in the middle of the night. He hit them with his fists more than 50 times and the reporting victim lost consciousness. She did not regain consciousness until the morning. The victim had severe bruising to her face and head and her eye was swollen shut. She waited several days to report the incident to police out of fear for her safety.

October 28, 2011 – Officers responded to a report of a rape of a developmentally disabled male. The victim stated that he stayed with a friend "in the Jungle." The suspect told the victim to follow him into a wooded area and then brought out a knife and forced him to disrobe before raping him.

FIRE HAZARD

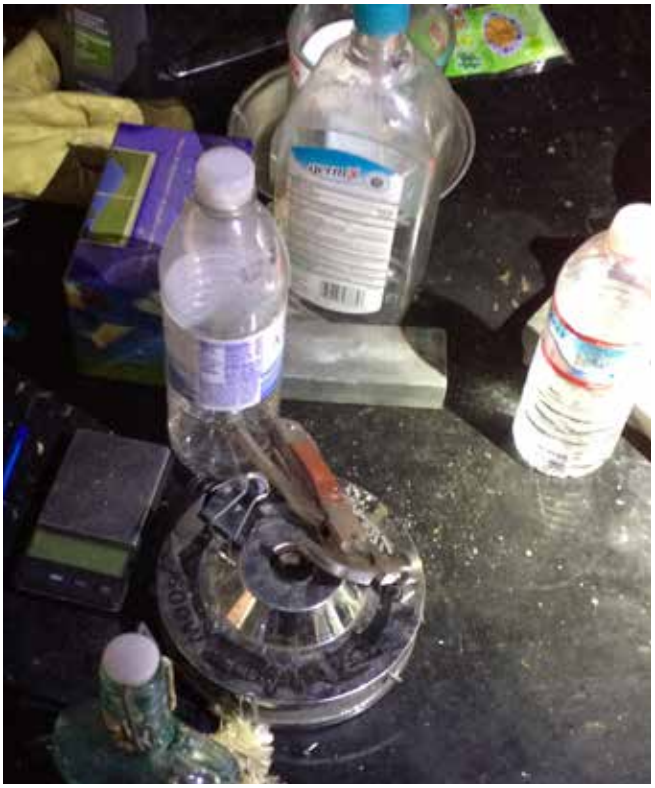
Because of the significant amount of frequent campfires for heat and cooking as well as the number of downed trees, dry brush, and debris accumulation, there are a large number of fires in the area. These pose a threat to the encampment residents, people in nearby neighborhoods, and to those who are travelling on the interstate.

In 2015, one encampment resident burned to death when he fell asleep with a small camp stove in his tent. As recently as February 2016, a tent on the periphery of the assessment area burned to the ground.

These fires also present a real risk to the residential buildings on Beacon Hill. The forest canopy of the greenbelt is highly overgrown and steeply sloped up the hill. In the dry summer months, a fire in the underbrush could quickly become a larger conflagration affecting a wide area.

Photo retrieved from: Kiro7.com. January 2, 2016. Photo via Jennifer Brown

February 11, 2016



FIRST-RESPONDER AND MAINTENANCE CREW ACCESS AND SAFETY

Much of the freeway and greenbelt area is accessible only by foot, which makes it more difficult for police, first responders, and maintenance crews to provide emergency services. The area has no lighting and can be especially hazardous because of the steep slopes, accumulation of solid and human waste, burn pits, and mudslides.

Police officers, firefighters, outreach workers, and Washington State Department of Transportation maintenance crews reported that they do not feel safe entering the area without a significant number of police officers present. Maintenance crews have been harassed in the past and Washington State Department of Transportation staff reported routine challenges in performing necessary bridge, drainage and electrical maintenance on the interstate structure because of the safety conditions. Seattle Fire Department personnel now require a police escort to enter the area, potentially delaying the response to a fire or medical emergency.

In addition to safety concerns, first responders report serious health concerns while operating in the area. For example, to respond to a fire the Fire Department must lay out several hundred feet of fire hose. In some cases, this must be dragged through large areas of solid and human waste, including needles. It can take hours for first responders to decontaminate their equipment after a single visit to the area.

WSDOT Maintenance workers were particularly concerned about the threat of being stuck with needles. The maintenance crews are responsible for clearing out the catch basins and drainage systems that prevent water from pooling under the freeway. But those are often filled with open hypodermic needles.

4 Infrastructure

The section of I-5 through the area is almost entirely elevated on support columns in both the north and southbound lanes, effectively two three-mile bridges. The shelter provided by the freeway makes the area particularly attractive to those seeking cover from the elements. But because of the density of encampments and waste accumulation, the freeway structure is difficult for maintenance workers to access in many locations. Washington State Department of Transportation staff report serious challenges conducting routine scheduled maintenance due to debris and criminal activity. While deferred maintenance is a problem, this area is even more vulnerable because there has been added damage to the structure from the adjacent encampment activities. The open sewers, solid waste accumulation, and fires, have caused excessive water ponding and large burns that have superficially damaged the underlying freeway concrete.

ELEVATED VIADUCT

The most prevalent infrastructure threat posed by the encampments is fire. The joint assessment team saw dozens of campfire pits and several large burn pits. Two sites in particular were host to large-scale fires in the past four months that included high volumes of trash, bicycles, scrap metal, and propane tanks. These fires required

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Seattle Fire Department response, shut down portions of the freeway, and resulted in visible but superficial damage to the concrete under-side of the interstate structure.

Some campsites had propane tanks, gas grills, butane canisters, and other incendiary equipment. At the campsite where the recent homicides occurred, for example, there were approximately eight propane tanks bundled together near a concrete support column for the bridge. A propane fire or explosion could cause significant harm to the bridge and nearby population. In addition, the thick underbrush in the greenbelt could significantly increase the scale of a fire in the dry summer months. Emergency response to a significant fire is hindered by the lack of access roads which prevent fire trucks from being able to reach much of the area.

STORM WATER SYSTEM

The storm water system under I-5 is owned by the Washington State Department of Transportation and is the primary way to facilitate drainage from the interstate. Drains from the freeway are directed through downspouts and either discharge into open drains or are directly connected to a large storm water pipe, which ultimately discharges to the Duwamish Waterway. The joint assessment team observed:

- Catch basins and mainline manholes that were buried or full of garbage and debris
- Catch basins that were missing covers
- Several blocked downspouts that were crushed or otherwise inoperable

Damaged drain pipes can cause freeway runoff to discharge directly into the ground, rather than into the storm water system. In some places, areas around the footings of support columns had been dug out by area residents to divert water.

5 Environment

Water from I-5 and the adjacent wooded areas flows into storm drains that go directly into the Duwamish River and then into Puget Sound. To better understand the potential down-stream water quality issues, Seattle Public Utilities examined the water run-off and soil quality within the assessment area. As noted above there were indications of sewage disposal into catch basins and open drainage. In one case, a resident built a makeshift bathroom, which included a toilet seat over a bucket and a urinal made with a pipe that discharges to the open drainage ditch. Piles of trash were located up gradient of catch basins. Clearly visible in the trash were batteries, electronics, syringes and liquid wastes. These materials are likely discharging directly into the storm water system during rain events. This issue is exacerbated by the fact that the catch basin grates and outlet traps were missing in several areas. Camp "kitchens," including dishwashing and clean up areas, were also present and a possible source of pollutants to the drainage system.

Seattle Public Utilities took water samples from five separate standing water sites. Conditions were dry during the inspection, so these results are not necessarily representative of runoff conditions, where contamination would likely be more substantial. Samples were evaluated for

fecal coliform bacteria, ammonia and surfactants. Fecal coliform and ammonia are indications of the presence of urine and feces. Surfactants indicate the presence of soap.

One of the samples, sample four, indicated a highly elevated level of fecal coliform bacteria.

Based on the visible conditions of the area, the assessment team estimates that in rain events, it is likely that waste, including contaminated dirty syringes, urine, feces, and hazardous materials, such as batteries, camping fuel, and chemicals, are entering the storm water system and being discharged into the Lower Duwamish Waterway.

SAMPLE RESULTS

- **Sample 1** (ID: CBNED044-044) was collected from a partially buried catch basin on the north end of the encampment area behind the business located at 1400 Airport Way S. This sample would represent material from up gradient and inflow from the catch basins east of this location.

  Results: Fecal coliform bacteria: 91 CFU/100ml, Ammonia: .41ppm, Surfactants not detected

- **Sample 2** (ID: MHNED051-029) was taken from a manhole located directly under I-5 behind the businesses located at 1762 Airport Way S. This sample represents discharges to the only SPU owned storm water pipe in the area. This pipe receives discharges from east of its location and the ditch areas up gradient and adjacent to the Mountain to Sound Greenway Trail just south of the Dr. Jose Rizal Park.

  Results: Fecal coliform bacteria: non detect, Ammonia .04ppm, Surfactants not detected

- **Sample 3** (ID: ditch@SWWalkerSt) was taken from the open concrete lined ditch below the eastern portion of the northbound lanes of I-5. The ditch receives water from both down spouts and surface flows from the hillside to the east. The sample was taken in an area where water had collected behind a pile of trash and downstream of the aforementioned makeshift urinal and toilet. Due to the lack of rain there was no flow in this ditch.

  Results: Fecal coliform bacteria: 727 CFU/100 ml, Ammonia: .05ppm, Surfactants not detected

- **Sample 4** (ID: CBSouthofCollegeSt) was taken in a catch basin that was receiving flow from the east. The CB contained trash and debris. The water in the CB was cloudy and foaming however there was no particular odor associated with the water.

  Results: Fecal coliform bacteria: 21,000 CFU/100 ml, Ammonia: .08ppm, Surfactants not detected.

- **Sample 5** (ID: flowing@campBayview) was taken behind the business located at 923 S Bayview St and is the only sample from surface flows that pass in close proximity to active camping. The sample was collected as surface flows cascaded into a partially open catch basin located below an I-5 downspout. It did not include discharge from I-5 drainage.

  Results: Fecal coliform bacteria: non detect, Ammonia .41ppm and Surfactants .25ppm