ChonGae Canal Point Source Park
Seoul, South Korea

The ChonGae Canal Point Source Park is an urban public space located along the restored ChonGae waterway. For centuries, the ChonGae River flowed naturally through the heart of Seoul, South Korea. Praised for its pristine waters and ability to transport goods, the ChonGae was a source of pride for the Korean capital city. As the population increased, however, the river became a dumping ground for waste. Raw sewage and polluted runoff flowed directly into the waterway, causing widespread sanitation and health problems. During the monsoon season, the river frequently overflowed its banks, sending the contaminated water into nearby neighborhoods. The dilapidated river became a symbol of poverty for the city; its banks lined with slums. In the 1920's and 1930's, the severely degraded river was sent below ground into a series on culverts and concrete pipes, divorcing the city from its historic waterway. In the mid-1960s, an elevated highway was built over the river, further obscuring its presence and dividing city neighborhoods.

In 2003, the city of Seoul decided to face the problem head-on. They launched a campaign to dismantle the elevated highway and rehabilitate seven miles of the severely degraded ChonGae waterway. The project aimed to improve the city's water quality, reconnect people with the historic river, and stimulate economic growth. The backbone of the project lies in the city's new water filtration system, which harvests and purifies waste water before it re-enters the ChonGae Canal. Sewage is diverted into a separate filtration system.

The Chongae Canal Point Source Park celebrates the location where cleansed water enters the restored waterway. The park's Sunken Stone Garden creates a vibrant public space that links two neighborhoods of the city's central business district. The water dramatically enters the park through a series of nine waterfalls that symbolize the future reunification of the nine provinces of North and South Korea. Stones from provincial

quarries frame the canal while creating an urban plaza that brings public access directly to the water's edge. Sloped and stepped stones become submerged and reappear as the water level fluctuates, causing the plaza to take on new forms while educating visitors about local climate conditions. The new canal design includes high levee walls that can accommodate a 100-year flood, protecting surrounding buildings during the monsoon season. A study from the University of California shows that real estate values have increased significantly since the park opened in 2005.

In terms of environmental benefits, the seven miles of restored stream has created habitat for numerous species of wildlife. According to the city government, "fish species have increase to 25 from 4, bird species have multiplied to 36 from 6, and insect species to 192 from 15." Furthermore, removal of nearly four miles of highway has led to a decrease in air pollution and temperature. Weather data reveals that summer temperatures in the park are now five degrees cooler than surrounding areas, as concrete and asphalt have been replaced by water and green space. Skeptics warned that highway removal would cause increased traffic congestion. In reality, though, traffic levels have fallen as the result of expanded bus and rail service, restrictions on cars, and higher parking fees.

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Project Resources

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