

double-decker highway system and they did a system to force the sound the noise from the highway to go out into the river and into the docks instead of into the community and if you walk there today on this promenade you don't hear the sound of the highway this great park system didn't last very long by the 1970s was really in terrible shape all the great parts of New York had fallen into real poor shape and something had to happen and this is the park system I encountered when I graduated from college this was the central park of the 1970s burnt out and abandoned buildings covered the graffiti lawns turned into dust bowls lakes full of garbage things had gotten really bad for Central Park so something dramatic had to happen and what happened next was really important people of New York got together a woman named Betsy Barlow was a point in the Central Market Administrator and she worked with philanthropic New Yorkers to create the Central Park Conservancy the Central Park Conservancy was a nonprofit organization which worked with the city of New York and got together to create a plan to restore and manage Central Park in a different way than parks had ever been managed before so this was the Sheep Meadow that I knew as a teenager in New York and then when I became a park ranger just out of college it was my job to help protect the new Sheep Meadow and let it grow in and explain to people that you couldn't play softball or football or soccer here and in work it was just a big piece of green grass to be a backyard for people who didn't have backyards and so this Conservancy model this spread across the country and in wench Atlanta Atlanta's parks were in big bad shape and Piedmont Park which had kudzu vines growing all over it and an empty swimming pool and it was more parking lot than Park created a Conservancy for Piedmont Park and it was beautifully restored that same swimming pool is now open and the kudzu has been cut back and a new pavilion built and those cars have been chased out of the park and Atlanta has its Central Park back now and even in Chicago right next to downtown Chicago you had a big parking lot underground and you had this chain yard an area that really needed to come to life and they brought it back to life in the most dramatic possible way they decked over that parking lot and they got the cars out of the way and you couldn't see the trains anymore they brought in public art and a big new performance space in Millennium Park the cost of 500 million dollars brought back life to downtown Chicago for residents and for visitors and for tourists they took that same lesson to Dallas and in Dallas Texas a big freeway cuts right through the heart of Dallas stinking and noisy and they covered it over the park on a deck and Clyde Warren Park was built with a combination of federal transportation funds and private dollars is now run by Conservancy even in San Francisco we're on the bay an old military base gradually became a place for airplanes and this was Crissy Field where the Army Air Force flew out of them by the 1990s this was derelict too but it became part of Golden Gate National Recreation Area and a Conservancy was founded for the Golden Gate National Recreation Area they got a firm called Hargraves landscape architects and they turned this old airfield into this big beautiful new field as place where every San Franciscan who has a dog goes has to run a dog and that means every San Franciscan but one of the greatest acts of urban alchemy is probably the High Line and the Highland was also built by Moses he had to get the freight trains off on 11th Avenue where they were killing people and up onto an elevated freight rail line which came downtown and served the factories and warehouses and the meat market of New York but by the 1980s it wasn't needed anymore and it became overgrown and when trains stopped running nature kept going and created this very

beautiful accidental Garden in the sky and when the neighbor when the property owners and Mayor Giuliani wanted to tear it down so they could develop the area some neighbors said no we have a better idea let's try to recreate this beauty and the Friends of the Highland got together with Mayor Bloomberg and other politicians and had a big new plan to make a park in the sky they got a great bunch of architects from a competition and Diller Scofidio and Renfro and field operations that Pete oh Dolph came up with this plan to sort of recreate that magical landscape and recreate the sense of the rails with precast concrete planks and they started to build this big new Park but nobody knew if it was going to work and so this Park which runs along 30 feet in the air on a narrow little ribbon of Steel needed elevators it needed a whole new kind of paradigm or urban design and it became an overnight success and that same magical quality of the landscape with these rails feathering into these grasses and flowering shrubs and trees was recreated and more important and neighborhood that was starved for parks suddenly had this green ribbon in the sky and almost as important it became a magnet for economic development 40 new buildings were built two billion dollars investment 200 million dollars in net new taxes this is what parks can do for cities but what do you do with your garbage and in New York makes a lot of garbage and the biggest garbage dump in the world was The Fresh Kills landfill but you needed a big idea there too and the big idea was to turn this landfill into a park so field operations came up with this big new plan to turn the 2,000 acres of garbage into two thousand acres of park and this is what it looks like today there's still 30 years more to do to make this park work but just covering over those piles of garbage with a rubber liner with new topsoil and with grasses has created the equivalent of an alpine meadow on what used to be mounds of garbage underneath those meadows however the garbage is still decomposing so what do you do with that is creating methane gas but that methane gas is a resource it can be sold and it's capped and siphoned off and taken and sold the gas companies and makes energy the other things that are happening in cities around the country and in New York is that you have to find room to build your parks and there that room is mostly in the wasted spaces the abandoned industrial infrastructure of old cities and in Brooklyn that was the case to that the shipping had gone away but the abandoned piers and wharfs are still there the Port Authority which owned the property planned to develop it for residential housing but the people who lived in Brooklyn Heights said hey wait a second not only are you going to block our views but we don't have any parks and they kept up with an idea for Park between the Manhattan bridge and Atlantic Avenue and that's this park it's Brooklyn Bridge Park and it's the ultimate recycled Park they took stone from a tunnel digging project under the East River and use the stone to form the new hills and this beautiful romantic and every drop of water in this park is harvested it goes into underground containers to be used for irrigation used for naturalistic wetland in the park it's used to irrigate the lawns and that's the new practice that we need this is a new paradigm for sustainable parks and sustainable cities and even the stairs on which these people are sitting are made from stone recycled for a bridge that was taken down an old bridge was taken down uptown so this is the example of how you build new parks but you don't waste any materials in building it even the wood and the benches is from an old warehouse that was tore down on the site this lesson of resilient cities and a necessity of parks and the roles they can play these multiple layers of value that parks can create is happening all over the world this is Singapore where they capture the

storm order and a big do what they call the marine Virage if there's too much water they lower dam and let it out into the ocean but that same dam keeps the ocean out and it's a big do reservoir for the city of Singapore in Madrid they had big highways next to the main river running for the middle of Madrid they sunk those highways underneath the ground they built beautiful new parks on top of them and suddenly a neighborhood that nobody wanted to live in is the most desirable neighborhood in Madrid and makes cities livable to have great new parks London had the Olympics but they also had an opportunities to take a brownfield a former industrial site reprogram it not just build an Olympic Stadium but build a park for the ages there a park that would naturally clean the polluted water through something called bioremediation use the soy on the plants to clean that dirty water and then you get back to New York the so called schoolyard these school yards are just big sheets of asphalt they're impervious you get hurt when you fall down on them they have no play value and they're locked up and closed up after school and on weekends and so my organisation the Trust for Public Land had a great idea we said what if we take these school yards and turn them at the full time playgrounds make them not just good for the schools but good for the neighborhood and transform that school yard into this this little soccer field is permeable it acts like a big sponge to soak up the rainwater you plant trees you have rain gardens you turn a negative space is a positive space with multiple layers of value even the streets are part of the public realm so the streets have all these striped areas and you can dig up those striped areas and you can make ideas of how to collect rainwater in them and that rainwater has collected not in some big pit but in a planting bed and that planting bed is called the Green Street and this Green Street in Queens during Hurricane Irene captured 30,000 gallons of stormwater runoff why is that important it's important because all that stormwater runoff is going into a combined sewer system and creating combined sewer overflows and polluting the harbors we need to be much smart about capturing stormwater and there's no space too small to capture stormwater this is called a street tree bioswale street tree bio soil is basically a glorified tree planting pit that you design it to capture stormwater and each of these captures 3000 gallons of stormwater overflow the Gowanus Canal in Brooklyn is a Superfund site meaning it's really badly polluted it's full of years of pollution from factories next to it and every time it rains the street surface runoff captures the hydrocarbons the oil and the gas all the nasty stuff and just sheet drains it right into the canal but a neighborhood Landscape Architect at DeLand Studio had a different idea which was create something called a sponge park and at the end of each Street you can have these sponge parks with soils and plants that absorb that water in that pollution and then clean it and gradually release it into the canal instead of into the storm sewer or dirty into the canal and in designing the sponge bark they realize that the layers that they have to deal with are not just layers of polluted soil but the layers of bureaucracy and this incredible drawing you see those bureaucratic layers the nine federal state and city agencies you have to go to to get permission to build a park on the edge of a polluted canal you have to have real persistence to create these new visions for landscapes for new cities and then we get to the whole controversy Lian's resilience means planning for climate change and the major storms that come with it like hurricane sandy that took that boardwalk and turned it into matchsticks and destroyed the beaches and killed 50 people in New York we have to plan for more resilient barriers and for more resilient cities not just in cities on the shoreline but here in Vermont where Hurricane Irene devastated

the state and destroyed towns and we have to figure out ways that we can keep those towns alive without having the Main streets turned into these Russian cataracts of rivers do we move them away from rivers do we create absorbent landscapes these are the big challenges facing us in cities and across this nation but you can play God you can take a degraded salt marsh and restore it and when you restore it those salt water plants they act as dutchess filters for pollution but they act to slow down the effects of storm surge and to prevent the flooding and your nearby neighborhoods we have to restore many salt marshes to make our cities more resilient and we still have to build barriers because I see the sea levels rising but you can make the barriers multifunctional put a bike path on it like they do in the dikes on Holland and make them beautiful and functional as part of your landscape in 2010 there was an exhibition at the Museum of Modern Art called rising currents and they said let's think about the New York that can withstand rising sea levels and the storms it was very prescient and we have to think of our cities as places they're greener that have more salt marshes that have barriers but also natural barriers that are places that are not just survivable but also livable