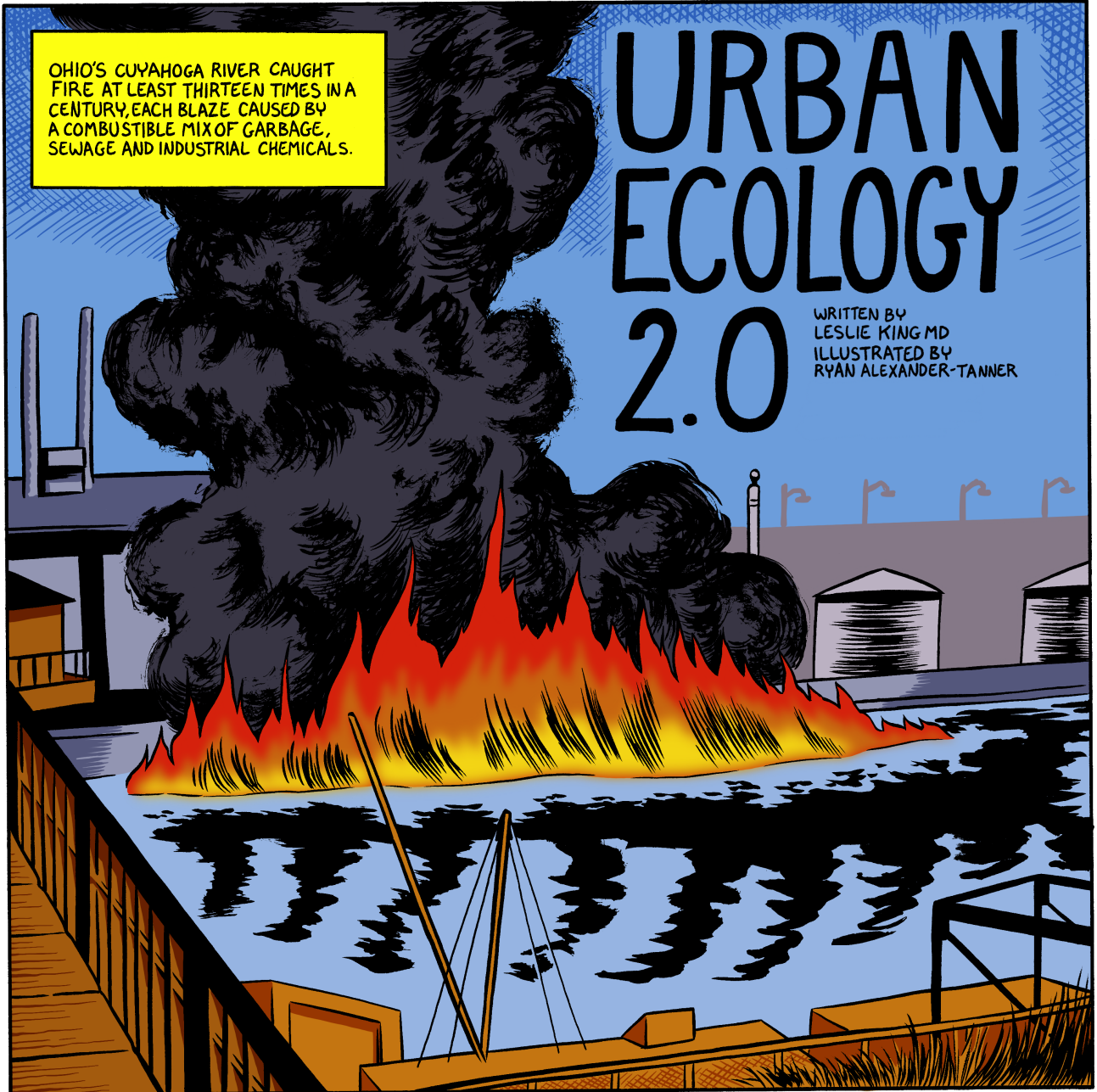


OHIO'S CUYAHOGA RIVER CAUGHT FIRE AT LEAST THIRTEEN TIMES IN A CENTURY, EACH BLAZE CAUSED BY A COMBUSTIBLE MIX OF GARBAGE, SEWAGE AND INDUSTRIAL CHEMICALS.

URBAN ECOLOGY 2.0

WRITTEN BY
LESLIE KING MD
ILLUSTRATED BY
RYAN ALEXANDER-TANNER



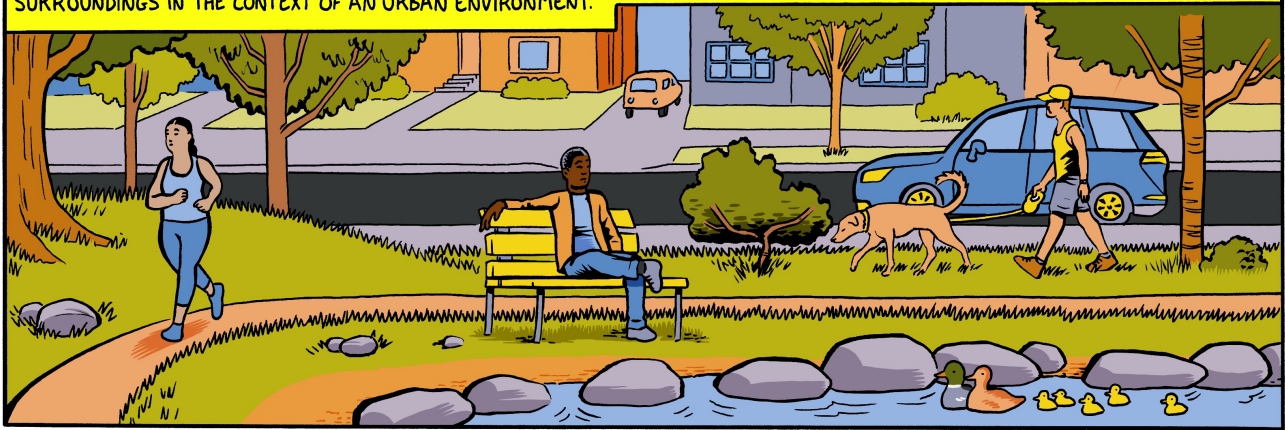
SINCE THE JUNE 22, 1969 FIRE LASTED ONLY 20 MINUTES, IT GARNERED LITTLE ATTENTION UNTIL THE BURN WAS COVERED AS NATIONAL NEWS BY TIME MAGAZINE.



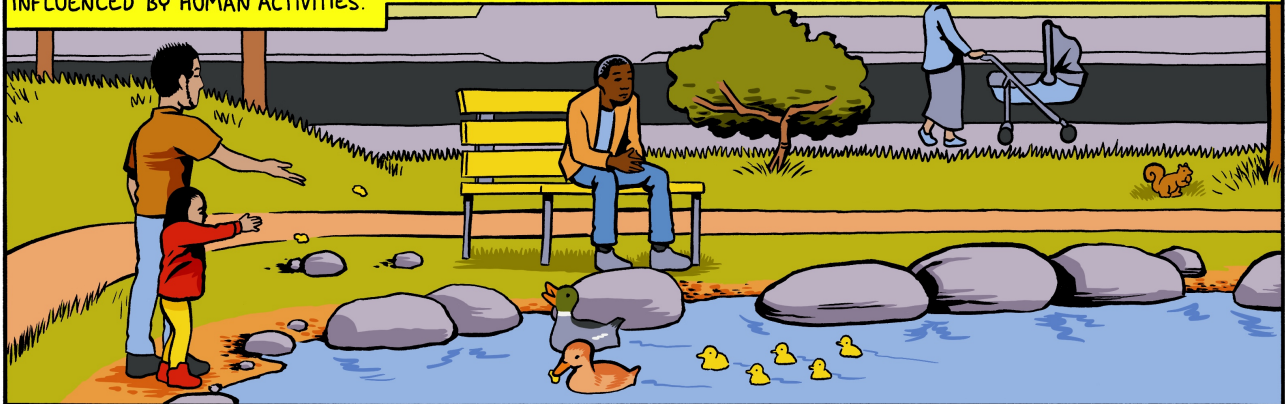
THE ENVIRONMENTAL ACTIVISM GALVANIZED BY THIS CATASTROPHE LED TO THE FOUNDING OF EARTH DAY ON APRIL 22, 1970. THE EPA, CLEAN AIR ACT AND CLEAN WATER ACT SOON FOLLOWED, AS DID THE EMERGENCE OF A SUB-DISCIPLINE OF ECOLOGY, URBAN ECOLOGY.



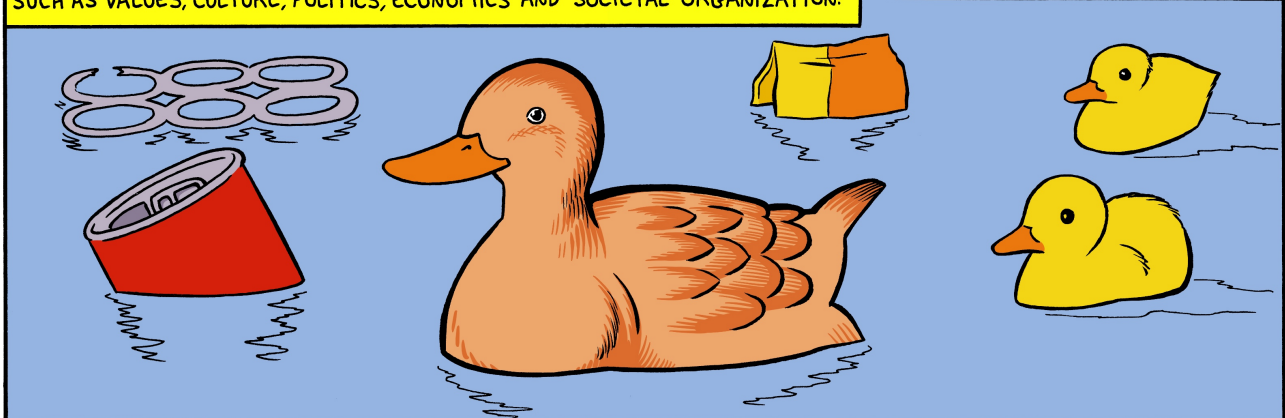
URBAN ECOLOGY IS THE SCIENTIFIC STUDY OF THE RELATIONSHIP OF LIVING ORGANISMS WITH EACH OTHER AND THEIR SURROUNDINGS IN THE CONTEXT OF AN URBAN ENVIRONMENT.



CITIES OR URBAN AREAS ARE VERY PECULIAR ECOSYSTEM TYPES AS THEY ARE ALMOST COMPLETELY ARTIFICIAL, INCLUDE ALL OTHER ECOSYSTEM TYPES SIMULTANEOUSLY (FORESTS, RIVERS, LAKES AND AGRICULTURAL AREAS) AND ARE STRONGLY INFLUENCED BY HUMAN ACTIVITIES.



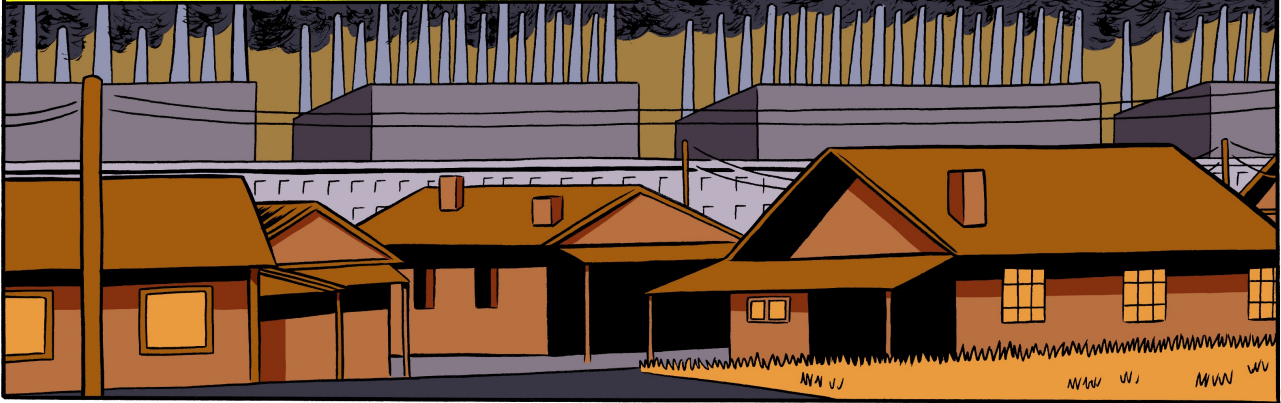
SINCE URBAN ECOSYSTEMS ARE A HYBRID OF HUMAN AND NATURAL FORCES, THEY ARE SUBJECT TO UNIQUE ANTHROPOGENIC STRESSORS SUCH AS VALUES, CULTURE, POLITICS, ECONOMICS AND SOCIETAL ORGANIZATION.



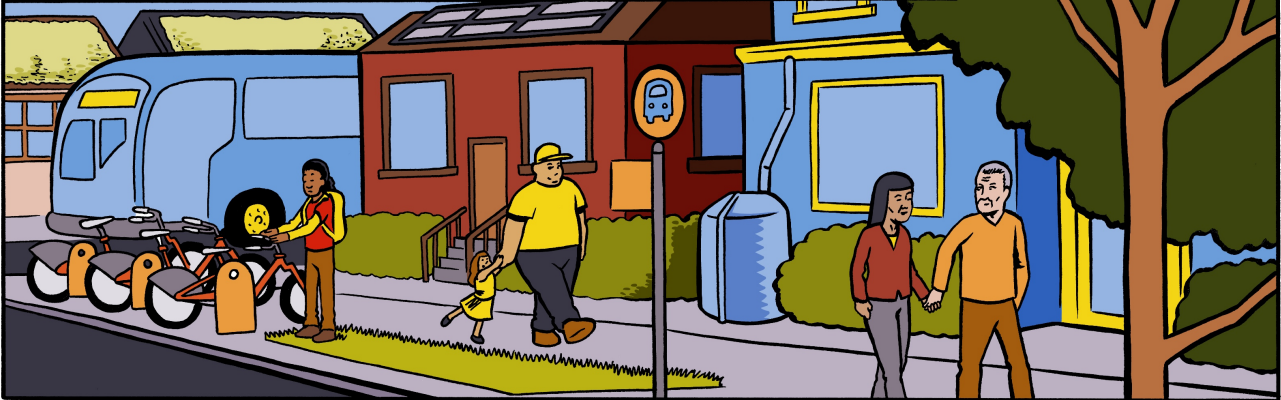
THE GOAL OF URBAN ECOLOGY IS TO CREATE BALANCE BETWEEN HUMAN CULTURE AND THE NATURAL ENVIRONMENT.



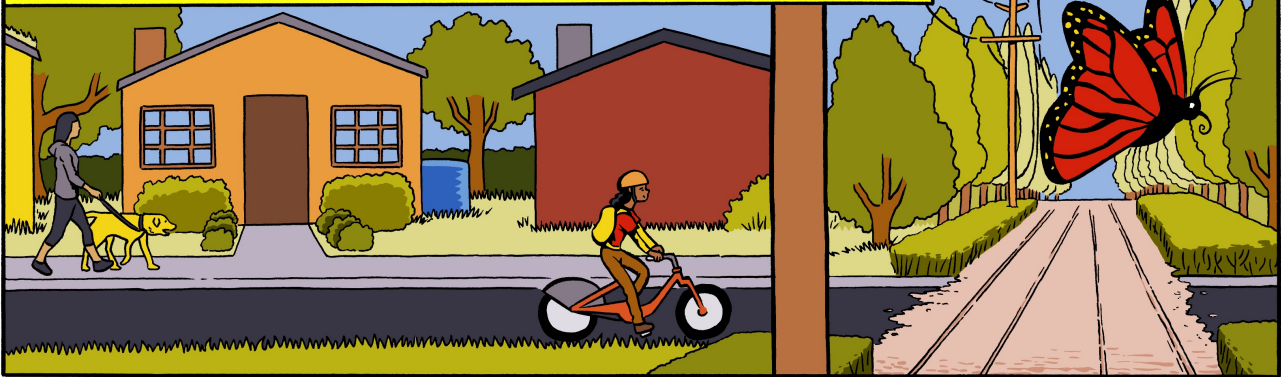
GIVEN THE HORRIFYING IMPACT OF THE ENVIRONMENTAL CONTAMINATION OF THE INDUSTRIAL AGE, URBAN ECOLOGY INITIALLY FOCUSED ON THE URGENT NEEDS OF CLEAN AIR AND WATER.



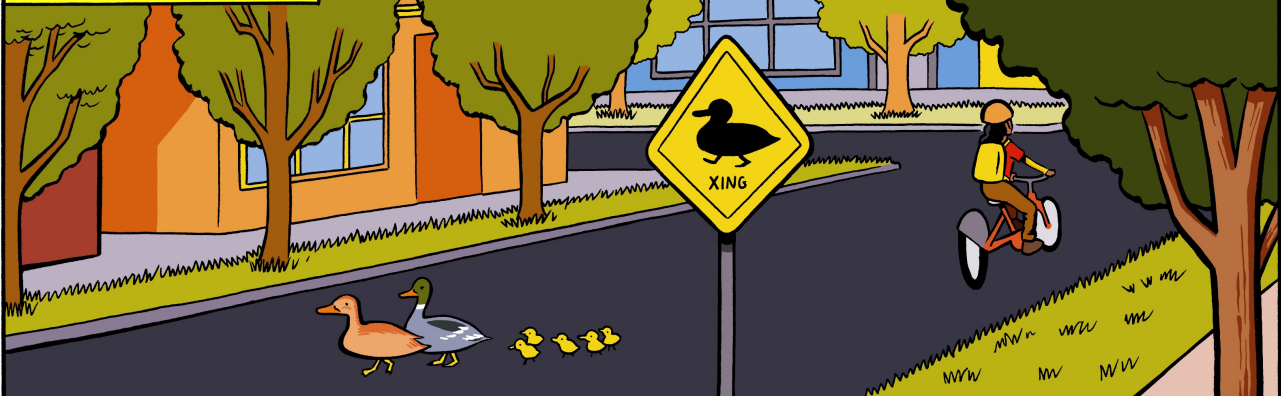
THE DISCIPLINE IS NOW BROADENING ITS SCOPE TO COLLABORATE WITH URBAN PLANNING EFFORTS TO DESIGN HOUSING, TRANSPORTATION AND ENERGY SYSTEMS THAT AVOID THE EGREGIOUS ERRORS OF THE PAST.



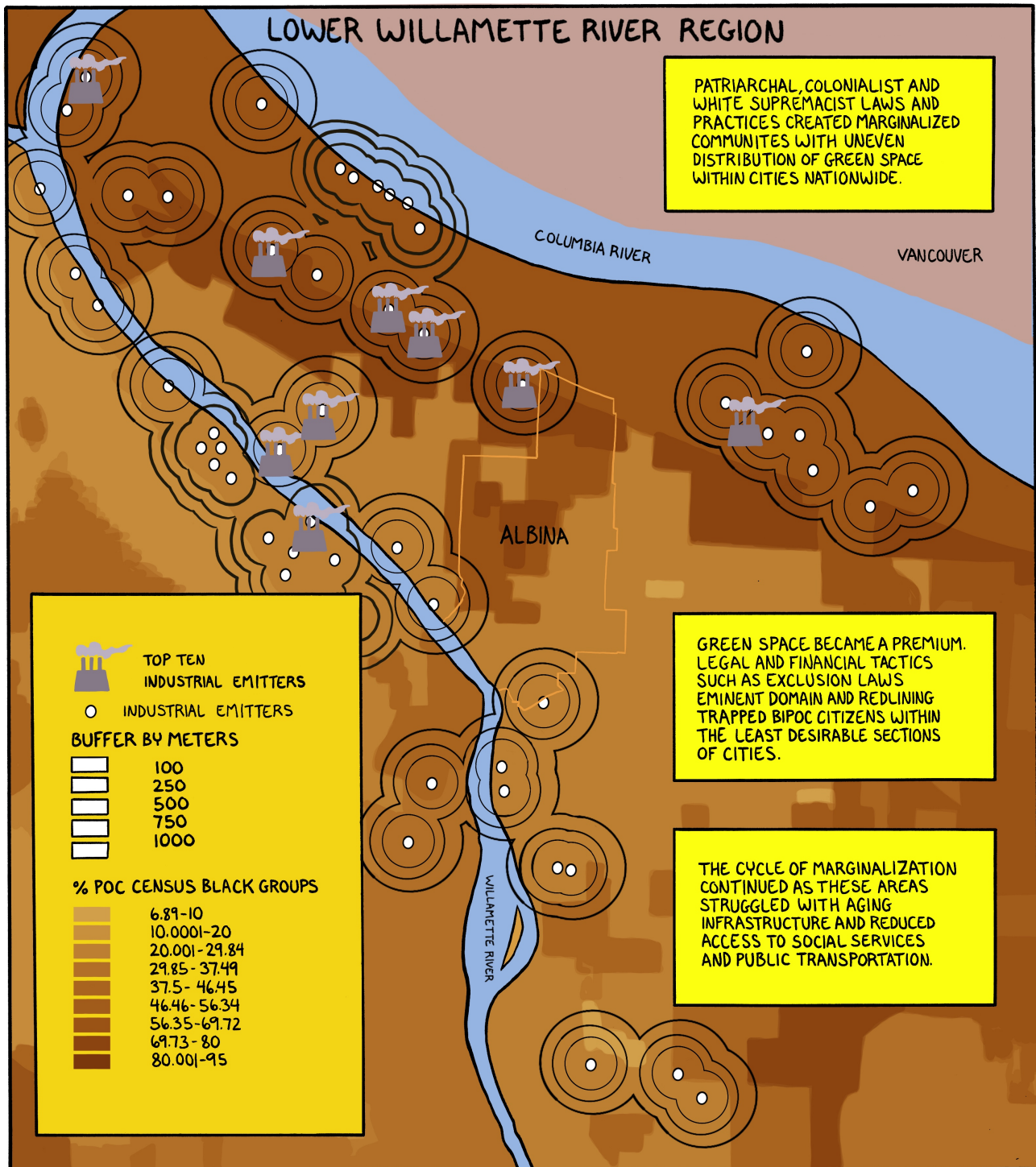
THESE DESIGNS EMPHASIZE THE IMPORTANCE OF GREEN SPACE IN URBAN AREAS FOR HUMAN HEALTH AS TREES AND GRASSES NOT ONLY FILTER AIR AND WATER BUT ALSO MITIGATE AGAINST EVER-INCREASING, CLIMATE-RELATED HEAT EMERGENCIES, PROVIDE POLLINATOR CORRIDORS AND FOSTER COMMUNITY GARDENS.



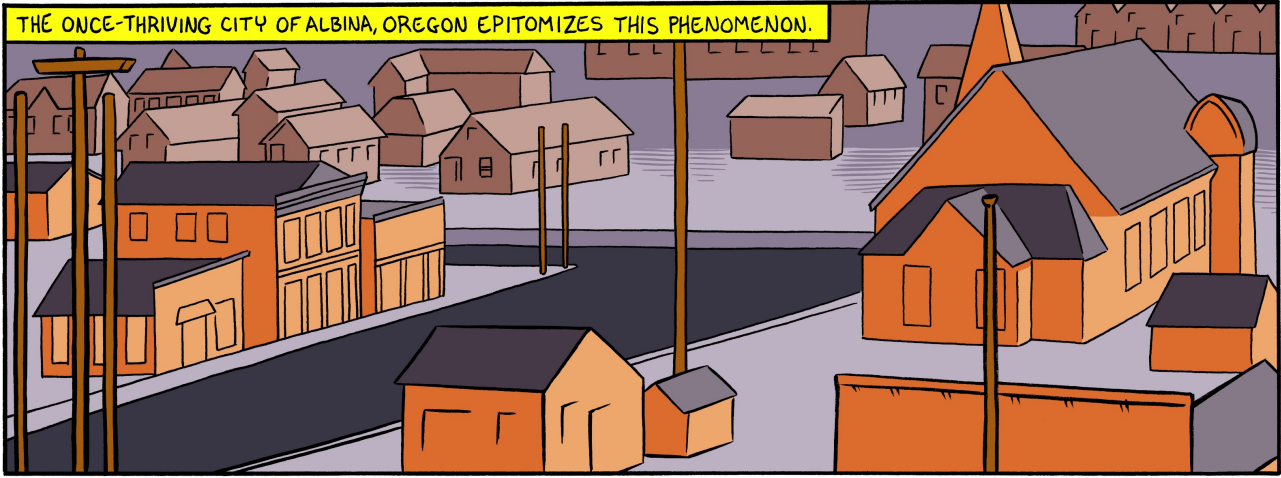
FURTHER, URBAN GREEN SPACES NOT ONLY ENABLE HUMAN COEXISTENCE WITH NATURE BUT ALSO PROVIDE IMPORTANT PATHWAYS FOR WILDLIFE CONNECTIVITY.



INCREASED AWARENESS OF SYSTEMIC RACISM AND SOCIAL INJUSTICES IN THE URBAN CITYSCAPE REQUIRED THE PRACTICE OF URBAN ECOLOGY TO PIVOT TOWARD DISCUSSIONS OF ENVIRONMENTAL JUSTICE, A SO-CALLED URBAN ECOLOGY 2.0.



THE ONCE-THRIVING CITY OF ALBINA, OREGON EPITOMIZES THIS PHENOMENON.



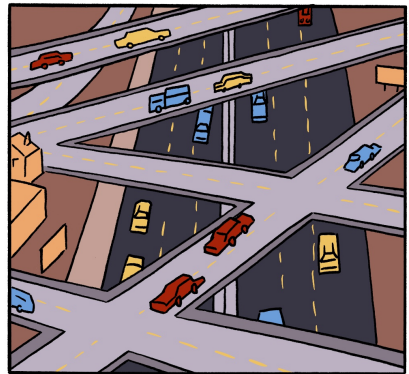
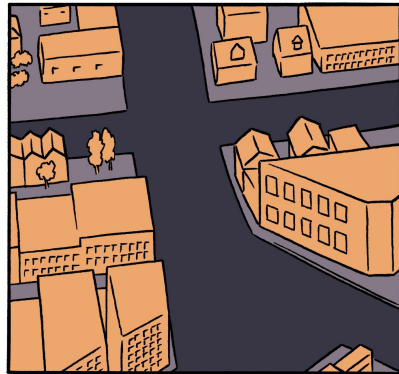
WHEN ALBINA WAS ANNEXED BY PORTLAND IN 1891, BLACKS AND IMMIGRANTS FLOCKED TO THIS NEW EASTSIDE NEIGHBORHOOD DUE TO ITS PROXIMITY TO THE WILLAMETTE RIVER DOCKS AND UNION PACIFIC RAILROAD TERMINAL.



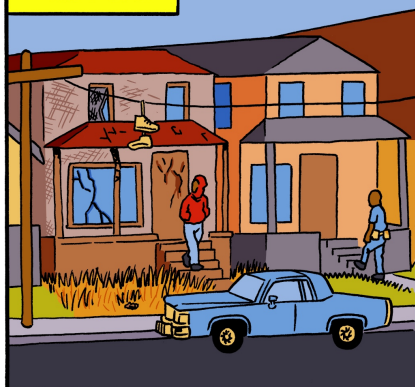
WHITE PORTLANDERS THEN CRAFTED STRICT RESIDENTIAL CODES WHICH FORCED BLACKS INTO THIS ONE SECTION OF THE CITY. BANKS DECLARED ALBINA "HAZARDOUS TO INVESTMENT" AND WITHHELD FINANCIAL SERVICES, A RACIST PRACTICE KNOWN AS "REDLINING."



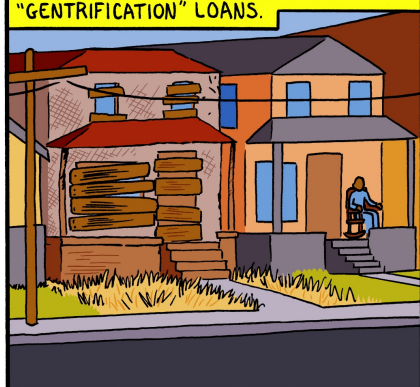
ALBINA WAS THEN DECLARED SUB-STANDARD AND BLIGHTED WHICH ALLOWED THE CITY OF PORTLAND TO INVOKE EMINENT DOMAIN TO BUILD INTERSTATE 5 AND HIGHWAY 99 (1950'S), THE ROSE QUARTER (1960'S) AND EMANUEL HOSPITAL (1970'S).



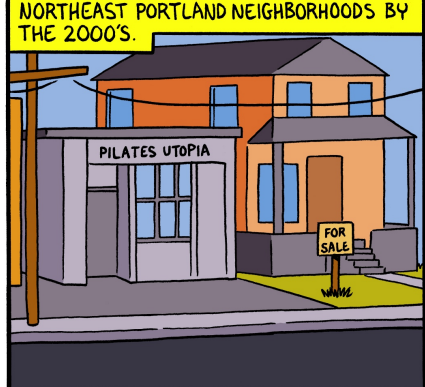
THE EPIDEMICS OF CRACK COCAINE AND GANG VIOLENCE FUELED ALBINA'S DECLINE IN THE 1980'S.



ALMOST NONE OF THE FEW BLACK RESIDENTS WHO REMAINED BY THE 1990'S QUALIFIED FOR URBAN RENEWAL OR "GENTRIFICATION" LOANS.



SKYROCKETING RENTS AND FOUR-FOLD PROPERTY TAX INCREASES SCATTERED THE REST TO "THE NUMBERZ" AND OTHER FAR NORTHEAST PORTLAND NEIGHBORHOODS BY THE 2000'S.



THE SHIPYARDS, STEEL MILLS AND RAILROADS THAT BROUGHT BLACKS TO ALBINA HEAVILY POLLUTED THE WILLAMETTE RIVER. THE LOWER PORTION DECLARED THE PORTLAND HARBOR SUPERFUND SITE IN 2000. THE INTERSTATE HIGHWAYS FURTHER CONTRIBUTE TO THE NEIGHBORHOOD'S TOXIC ENVIRONMENT.



FOREST PARK CONTAINS OVER HALF OF PORTLAND'S 10,000 ACRES OF GREEN SPACE, WHILE ALBINA HAS VERY FEW GREEN SPOTS. THIS DISPARITY RENDERS THE NEIGHBORHOOD AN URBAN HEAT ISLAND, AVERAGING 7 DEGREES HOTTER THAN THE REST OF THE CITY.



THE INFLATION REDUCTION ACT OF 2022 INCLUDES \$1.5 BILLION FOR THE U.S. FOREST SERVICE'S URBAN AND COMMUNITY FORESTRY PROGRAM. AGENCY LEADERS PLAN A COMPETITIVE GRANT PROCESS TO ALLOT FUNDING TO ORGANIZATIONS SUCH AS THE ALBINA VISION TRUST, A NONPROFIT DEDICATED TO INCREASING URBAN GREEN SPACE.



THIS PROJECT ILLUSTRATES THE CRUCIAL ROLE OF ENVIRONMENTAL JUSTICE WITHIN URBAN ECOLOGY 2.0. RACIST PRACTICES RENDERED AN ENTIRE NEIGHBORHOOD DEVOID OF THE NATURAL WORLD. RESTORING ALBINA'S BLIGHTED HABITAT FOSTERS EQUITY AND BENEFITS BOTH HUMANS AND NATURE.

