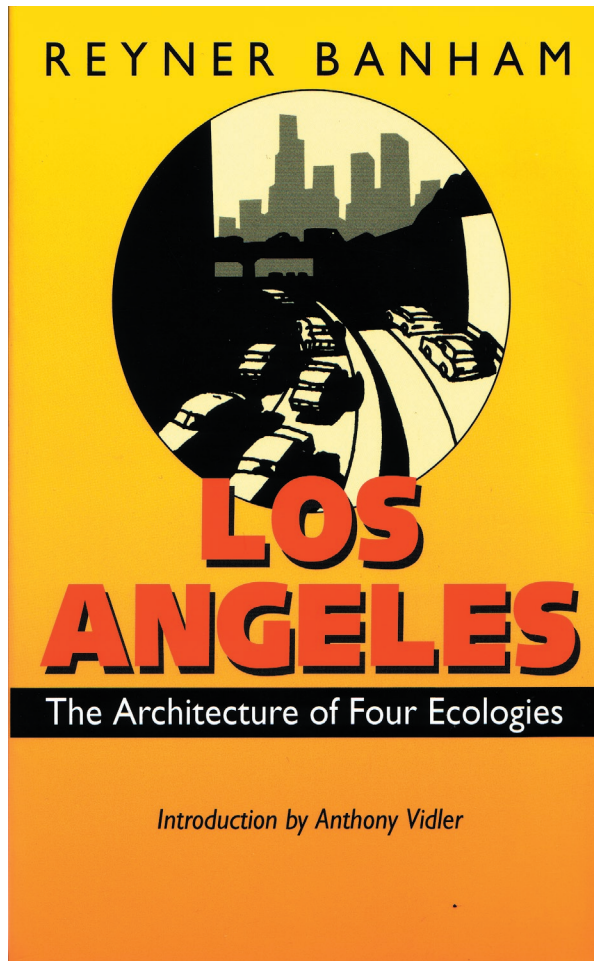




THE (INVISIBLE) LOS ANGELES RIVER

Graphic Designer
as Reporter
as Researcher



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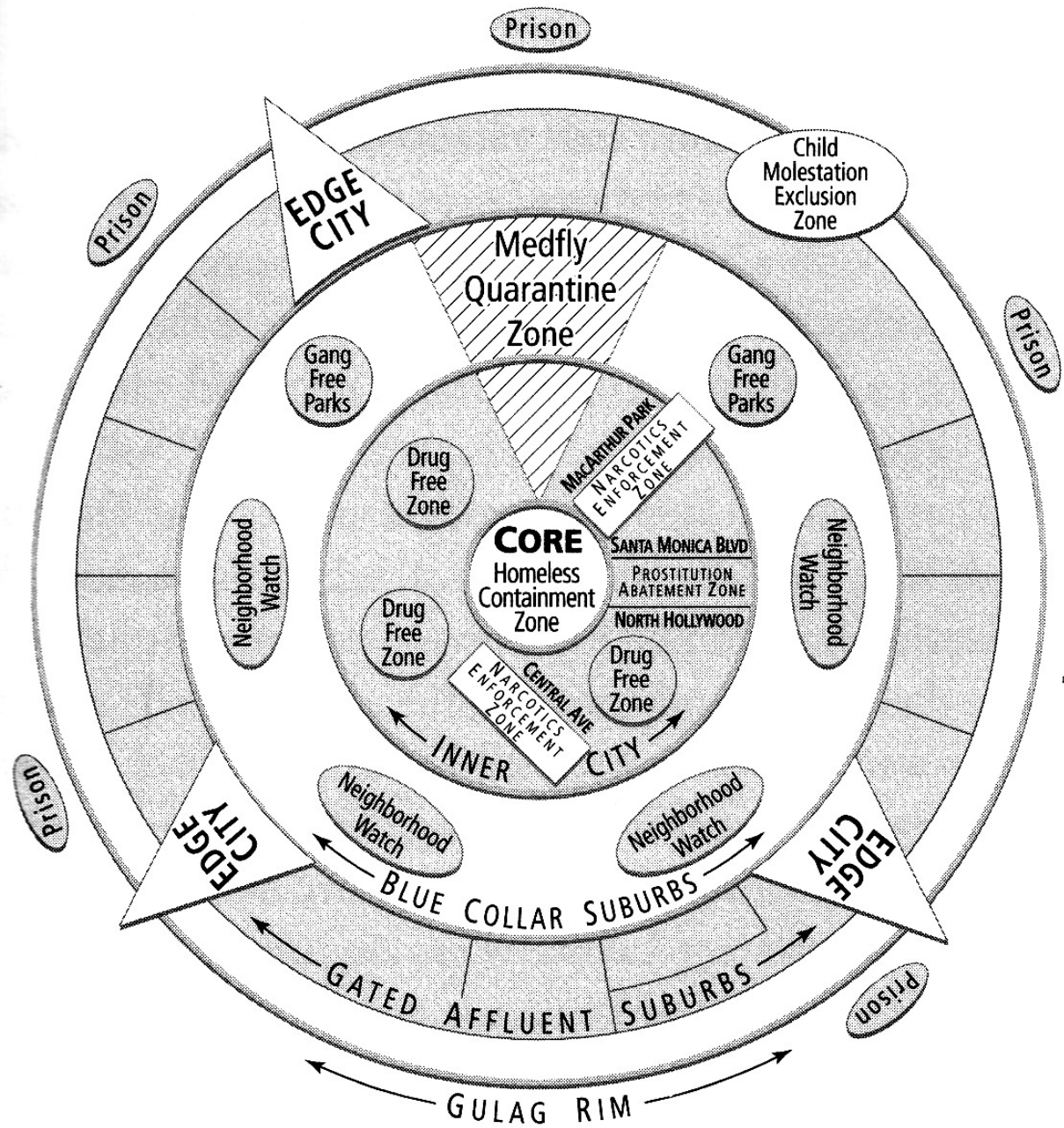
ECOLOGY OF FEAR

Los Angeles
and the
Imagination
of
Disaster



MIKE DAVIS

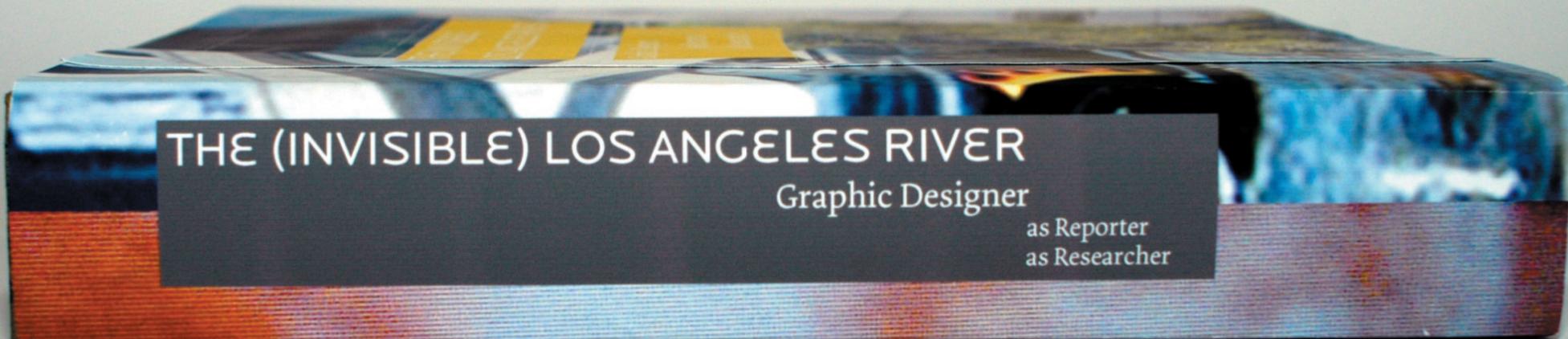
AUTHOR OF CITY OF QUARTZ





THE (INVISIBLE)
LOS ANGELES RIVER

Graphic Designer
as Reporter
as Researcher



THE (INVISIBLE) LOS ANGELES RIVER

Graphic Designer

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SURVEILLANCE

SAMPLING

DOCUMENTATION

QUOTATION

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II:
Channels, Embankments, and
Tributaries

III:
Dams

IV:
Pastoral Drainage Basin

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Historicist Renewal Zone

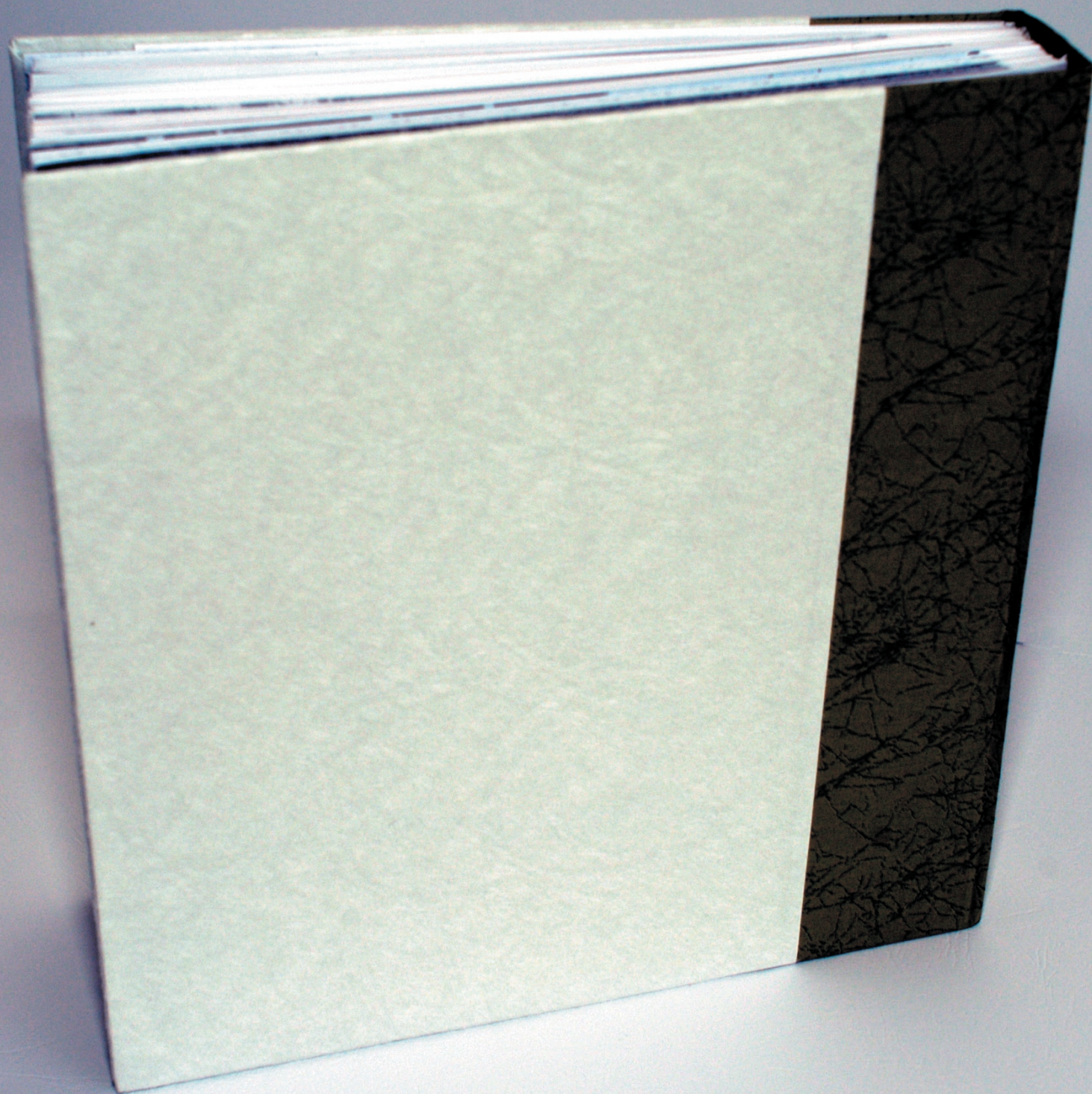
VI:
Mutant Drag Strip Zone

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THE (INVISIBLE)
LOS ANGELES RIVER

Graphic Designer
as Reporter
as Researcher

By Randy Nakamura





GENARO MOLINA Los Angeles Times
OLE: Debris lines the bottom of the sinkhole on Feb.

February 2005: After heavy winter storms, a sinkhole opens up on Tujunga Ave., former riverbed for the Tujunga Wash, tributary to the Los Angeles River.

THE (INVISIBLE) LOS ANGELES RIVER



Above: Water level markers on Hansen Dam, backside of spillway. Increments are in feet above sea level.

THE (INVISIBLE) LOS ANGELES RIVER

Graphic Designer
as Reporter
as Researcher



By Randy Nakamura

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Dry River Beds 4. Motion Pictures-Explosions 5. Land Use-Los Angeles

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Thank you family, friends, and faculty.
Without whom none of this would have been possible.

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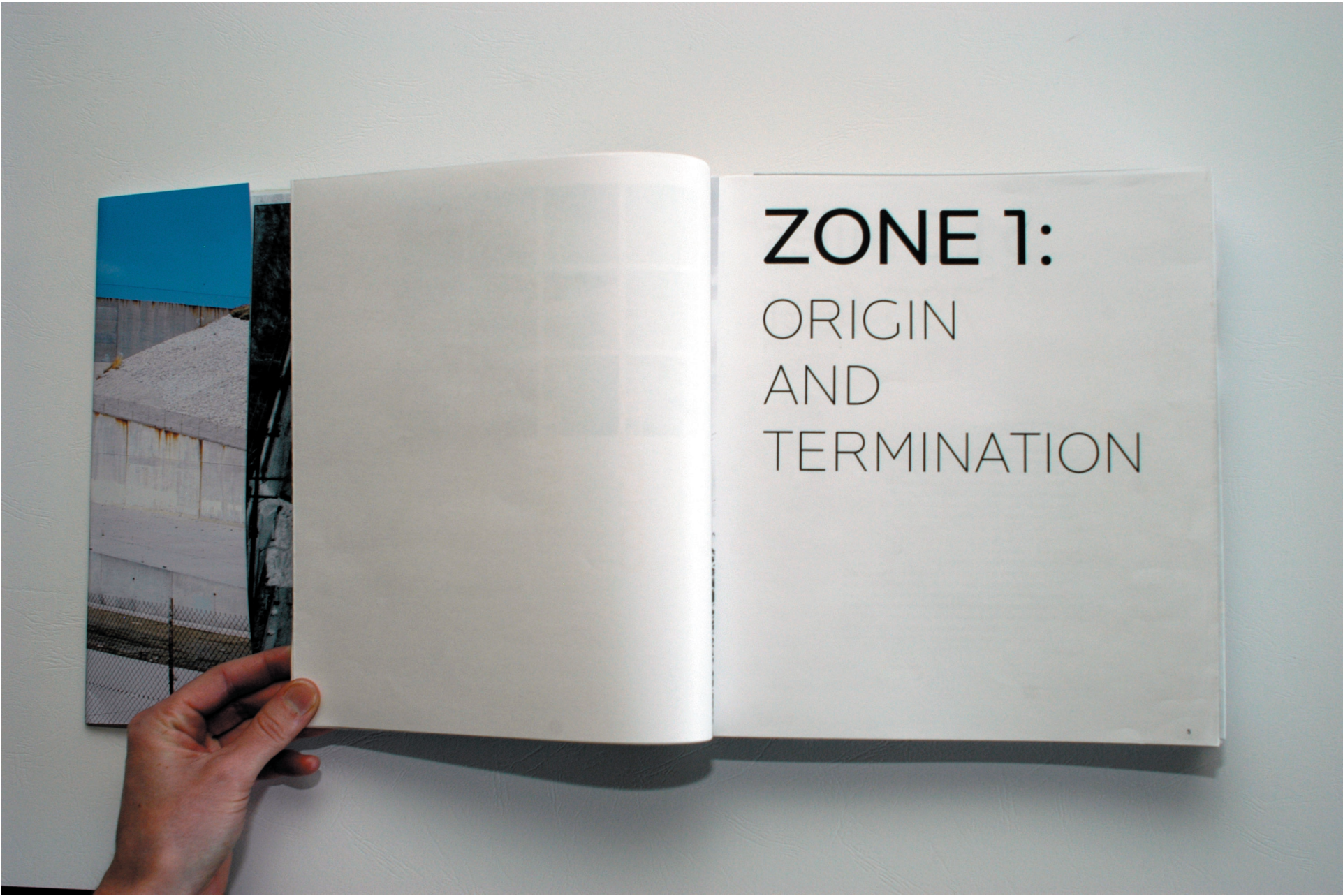


CONCRETE

WATER

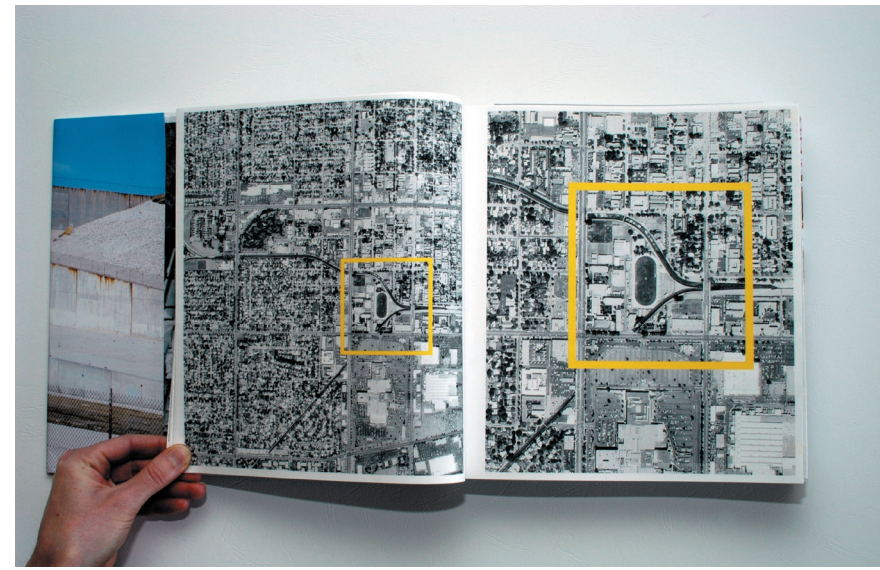
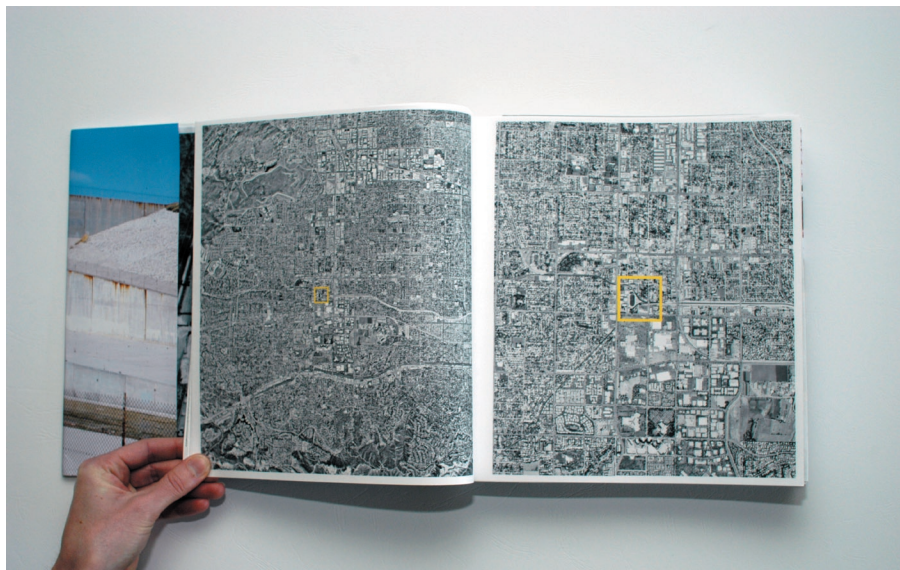
DEBRIS

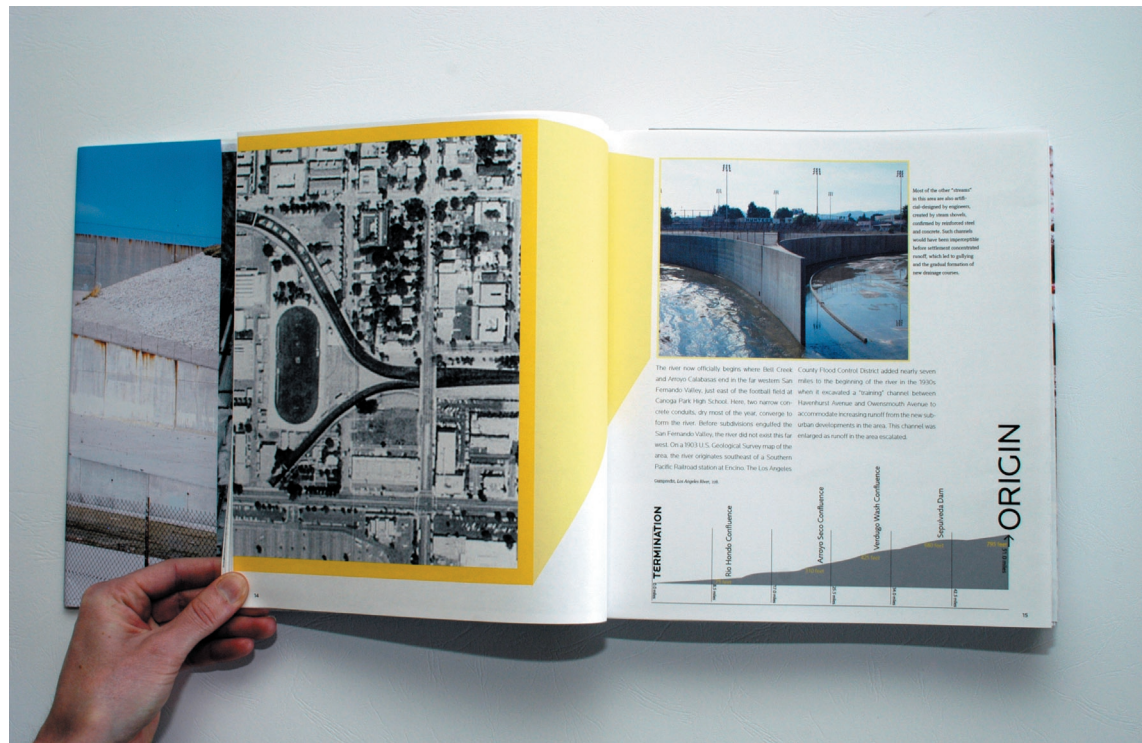
VEGETATION



ZONE 1:

ORIGIN
AND
TERMINATION



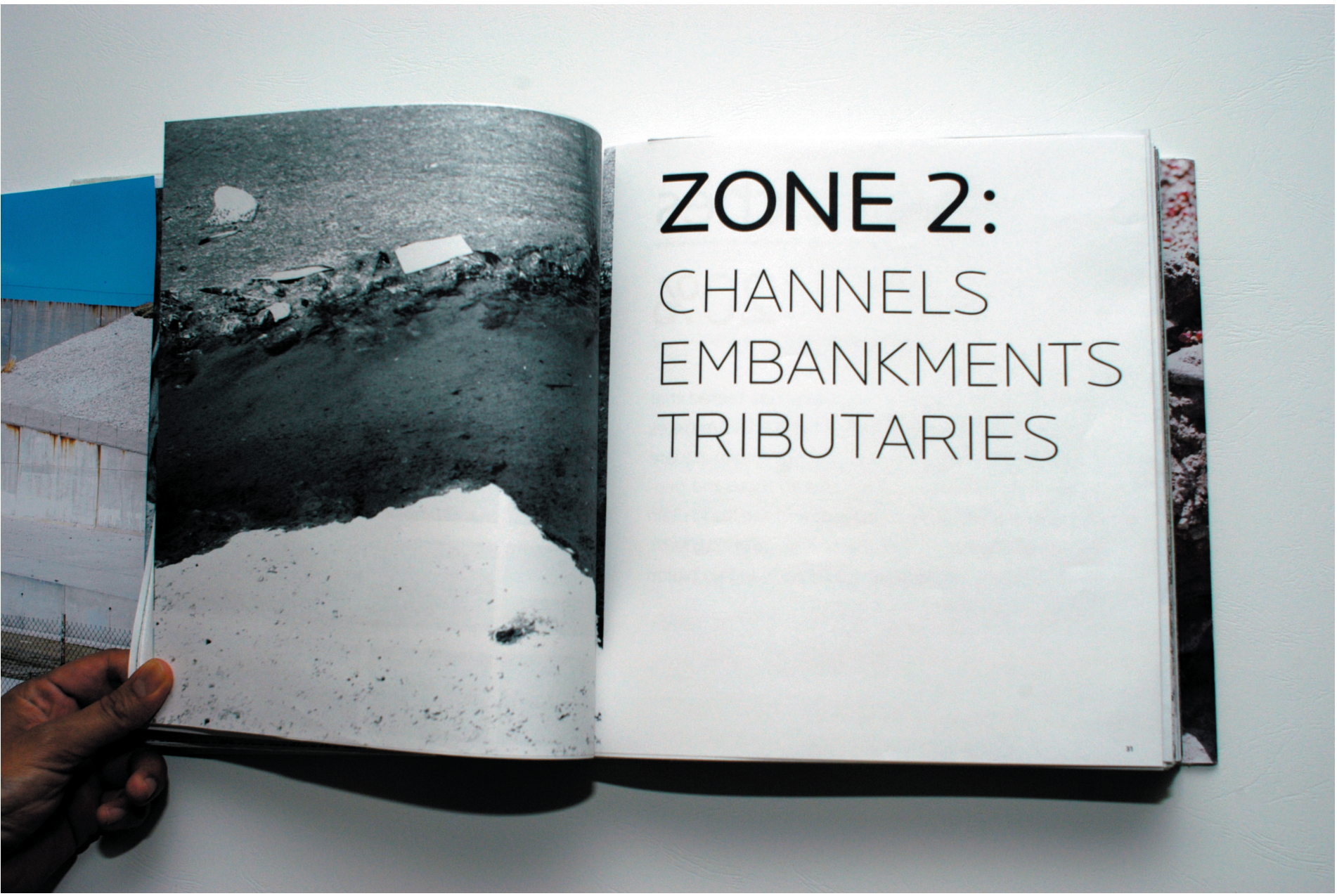


UFF PARK BEACH,

After storms in January 2005 eight to twelve foot piles of debris began appearing on the shoreline at Long Beach. Piled there by bulldozers, the debris contained a miscellany of trash and shopping carts, but are mainly composed of *arundo donax*, also known as the giant reed. *Arundo Donax* clogs the waterways of the Los Angeles River. It is easily mistaken for bamboo and is a non-native species introduced in Southern California as a decorative plant in the 19th century. Highly tolerant of a wide range of ecological conditions it can rapidly infest an area and completely devastate native flora. It is native to India and the Mediterranean. There are two ways to remove it: herbicides or fire.

Arundo donax growing on the soft bottom in the Glendale Narrows. When the giant reeds come loose in the waterway they can become matted and create accidental debris dams behind bridges and narrow culverts. The Glendale Narrows has anywhere between 7-14% of its total acreage infested by *Arundo donax*.





ZONE 2:

CHANNELS
EMBANKMENTS
TRIBUTARIES

31

4-40 inches

Range of fluctuation in annual rainfall in the Los Angeles basin

20%

Percentage of time historical average rainfall of 14.97 inches is matched in Los Angeles

The U.S. Army Corps of Engineers has feared that
rivers overtopping the levees in central Los Angeles
might send water gushing over eighty-two square
miles that are home to five hundred thousand people,
many of whom have moved onto the flood plain
believing that the concrete levees protect them.
In an event would likely do more than two billion
dollars in damage.

ZONE 2:

CHANNELS

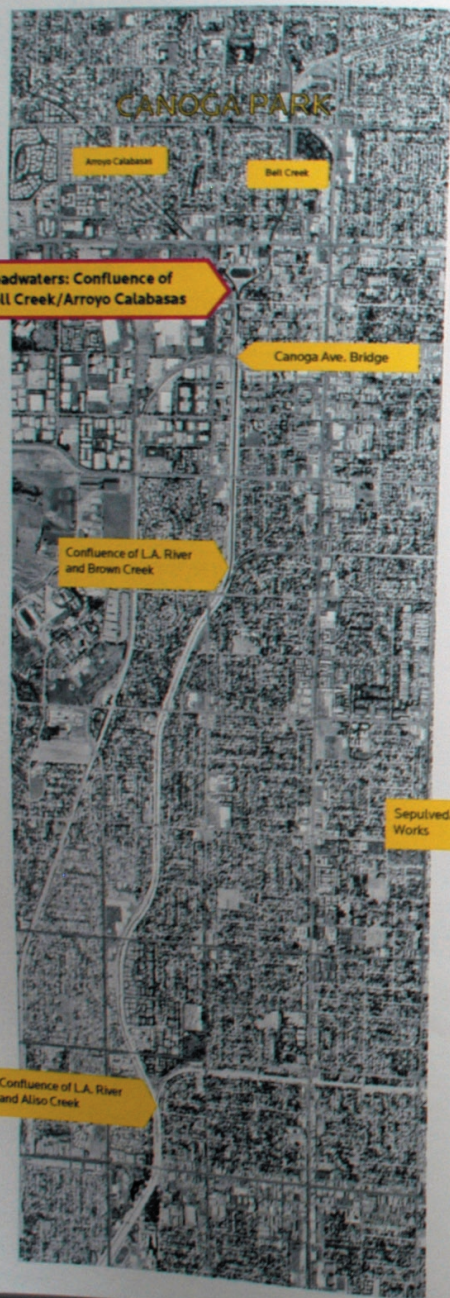
EMBANKMENTS

So far the hyperregulated flood-control basins have not failed their tests. But in past deluges, the rivers have formed enormous lakes south of the Glendale narrows, and it is not inconceivable that the Los Angeles River might one day try to reclaim Washington Boulevard.

Orsi, Hazardous Metropolis, 7.

51-46 miles
WEST
DISTANCE TO MOUTH OF
RIVER AT LONG BEACH

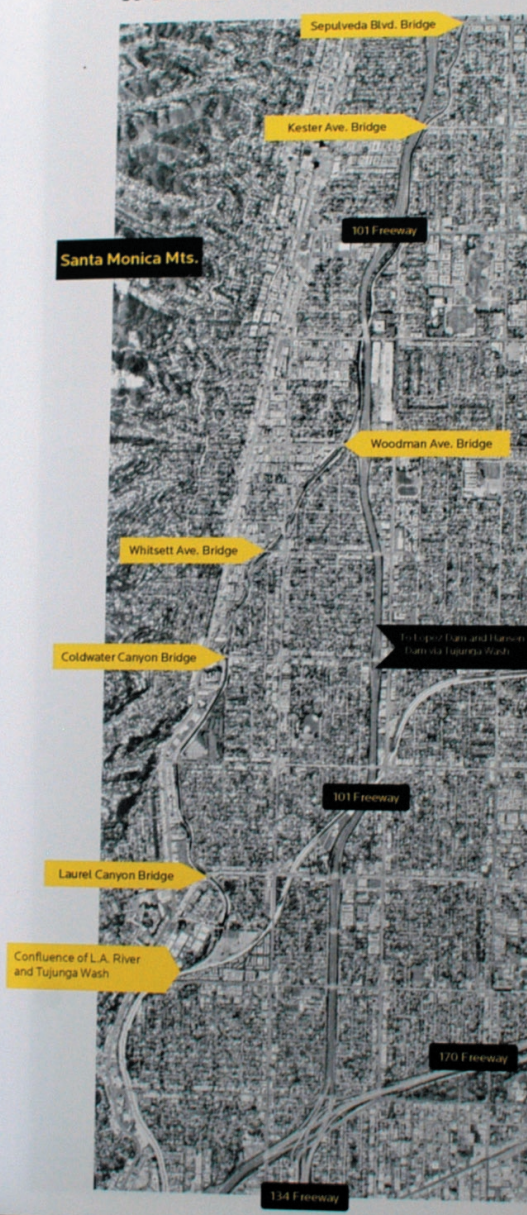
HEADWATERS TO LONG BEACH



45-40 miles
WEST



39-34 miles
WEST

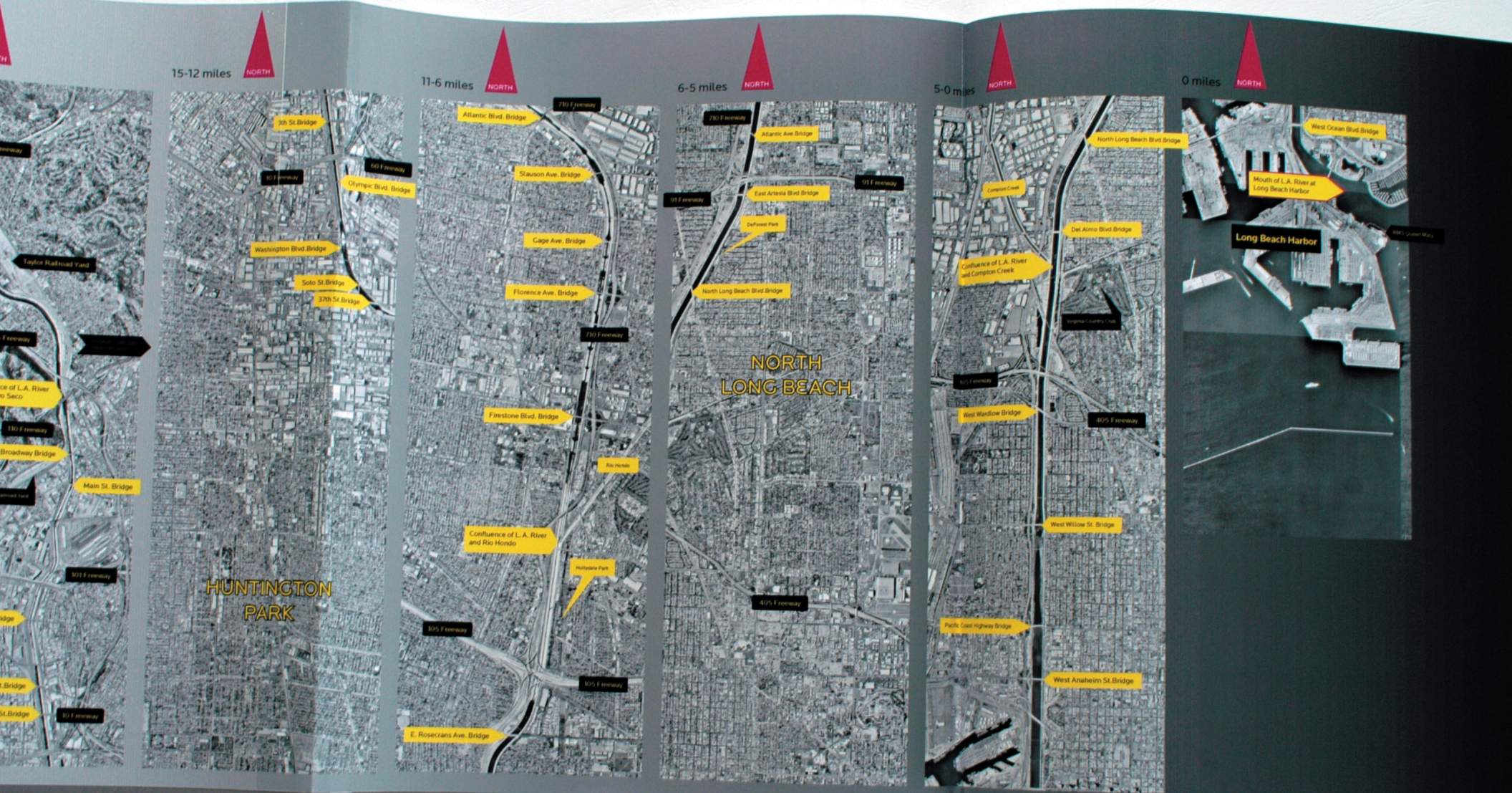


33-28 miles
WEST



27-22 miles
WEST





4-40 inches

Range of fluctuation in annual rainfall in the Los Angeles basin

20%

Percentage of time historical average rainfall of 14.97 inches is matched in Los Angeles

The U.S. Army Corps of Engineers has feared that rains overtopping the levees in central Los Angeles might send water gushing over eighty-two square miles that are home to five hundred thousand people, many of whom have moved onto the flood plain believing that the concrete levees protect them. In an event would likely do more than two billion dollars in damage.

Metropolis, 7.

ZONE 2:

CHANNELS

EMBANKMENTS

So far the hyperregulated flood-control basins have not failed their tests. But in past deluges, the rivers have formed enormous lakes south of the Glendale narrows, and it is not inconceivable that the Los Angeles River might one day try to reclaim Washington Boulevard.

Orsi, *Hazardous Metropolis*, 7.



RIP RAP SIDE SLOPES (TRAPEZOIDAL CHANNEL)



Cobblestone or coarsely broken rock used for protection against erosion of river embankments.



CONCRETE SIDES (RECTANGULAR CHANNEL)



Channels lined with concrete in the form of a rectangular box. Sections of the river that carry low or moderate amounts of water often use this type of construction.



GROUTED STONE SLOPES (TRAPEZOIDAL CHANNEL)



Channel lined with stone set in cement mortar. Trapezoidal shape strengthens channel walls and prevents scouring at base of wall and bed. All high capacity parts of the channel are trapezoidal shaped.



UNLINED CHANNEL BOTTOM (TRAPEZOIDAL CHANNEL)



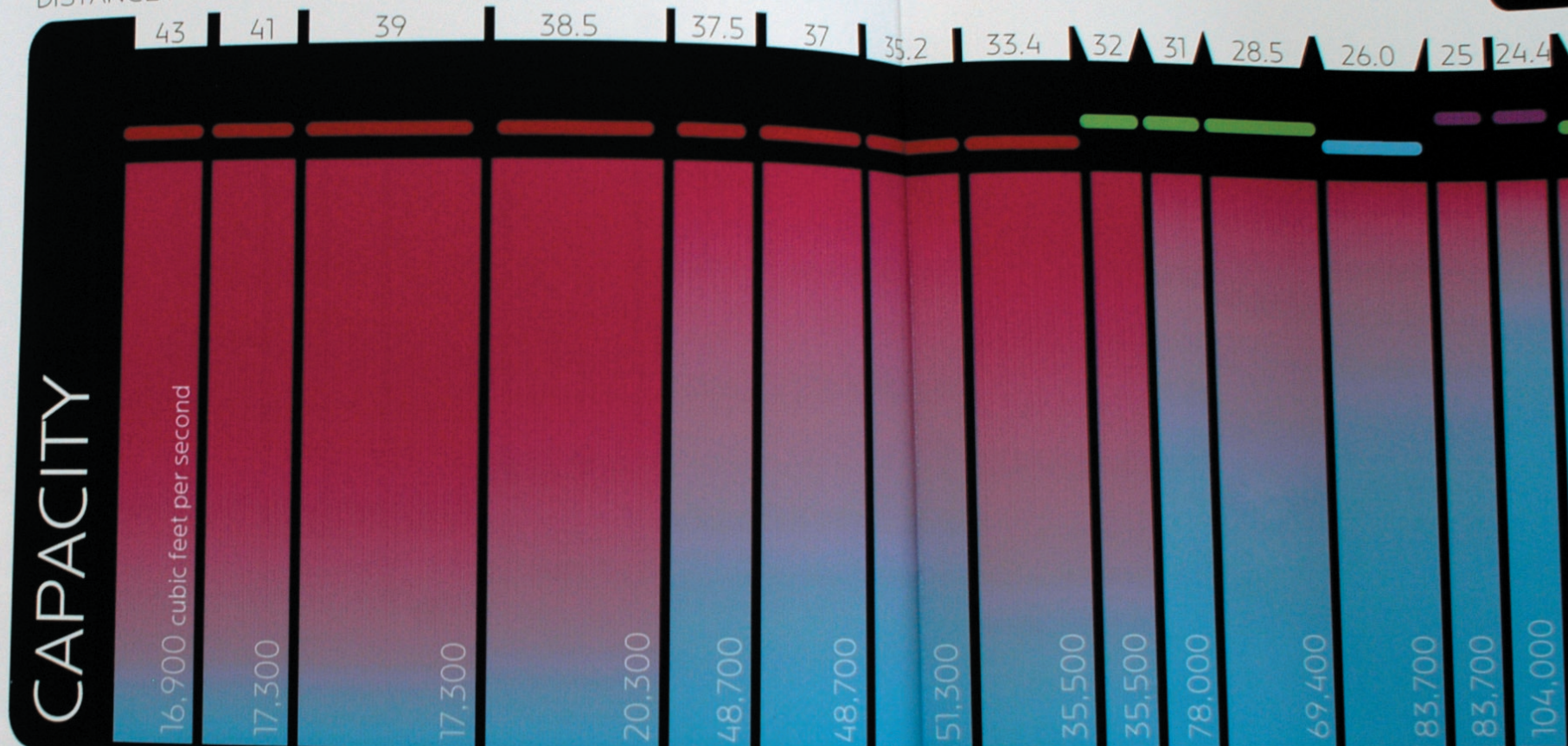
No concrete or rip rap lining on riverbed. Bottom is mud and cobblestone. The water table is too close to the surface to allow paving.

- Rectangular, rip-rap
- Trapezoidal, grouted stone/concrete
- Trapezoidal, grouted stone/soft bottom

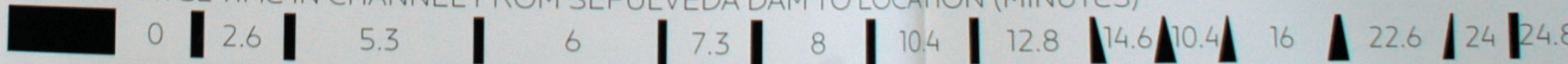


CHANNEL DISTANCES, CAPACITIES & CONFIGURATIONS FROM SEPULVEDA DAM TO LONG BEACH

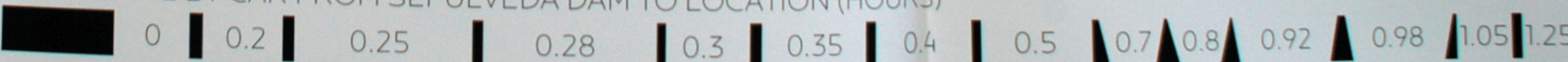
DISTANCE FROM MOUTH OF RIVER (MILES)



WATER TRAVEL TIME IN CHANNEL FROM SEPULVEDA DAM TO LOCATION (MINUTES)



TRAVEL TIME BY CAR FROM SEPULVEDA DAM TO LOCATION (HOURS)



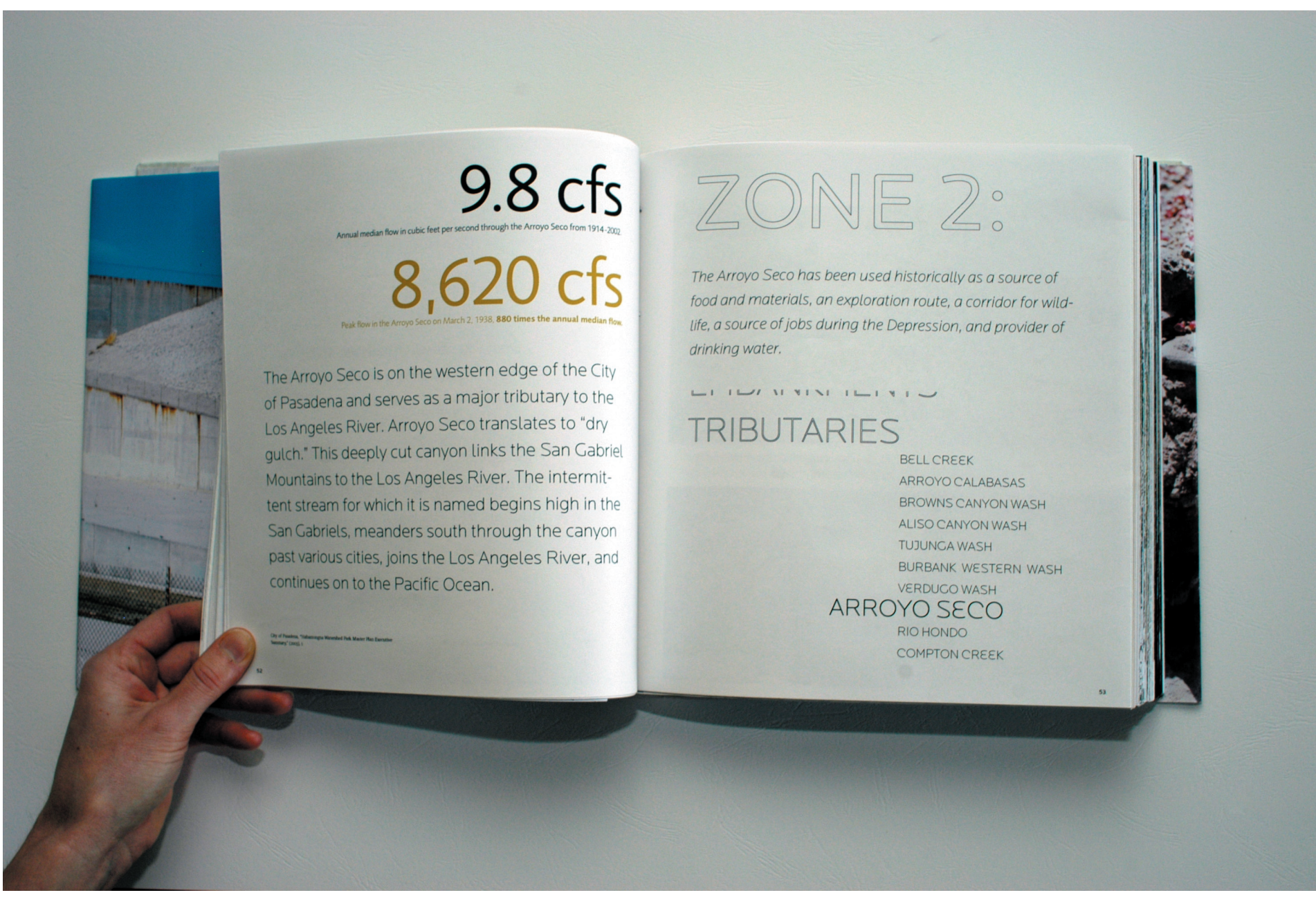




The visual impact of confining the river's dry season flow to a fraction of the width of its channel is great. Because the river was designed to accommodate flood discharges as much as twenty thousand times its natural summertime flow,

what you see when you look at the river most of the year is a broad swath of dry cement, which looks like nothing so much as a deserted freeway.

This is especially true south of downtown Los Angeles, where the river's bed is as much as 510 feet wide.



9.8 cfs

Annual median flow in cubic feet per second through the Arroyo Seco from 1914-2002.

8,620 cfs

Peak flow in the Arroyo Seco on March 2, 1938, 880 times the annual median flow.

The Arroyo Seco is on the western edge of the City of Pasadena and serves as a major tributary to the Los Angeles River. Arroyo Seco translates to "dry gulch." This deeply cut canyon links the San Gabriel Mountains to the Los Angeles River. The intermittent stream for which it is named begins high in the San Gabriels, meanders south through the canyon past various cities, joins the Los Angeles River, and continues on to the Pacific Ocean.

City of Pasadena, "Sabalingua Woodland Park Master Plan Executive Summary" (2005).

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ZONE 2:

The Arroyo Seco has been used historically as a source of food and materials, an exploration route, a corridor for wildlife, a source of jobs during the Depression, and provider of drinking water.

TRIBUTARIES

BELL CREEK
ARROYO CALABASAS
BROWNS CANYON WASH
ALISO CANYON WASH
TUJUNCA WASH
BURBANK WESTERN WASH
VERDUGO WASH
ARROYO SECO
RIO HONDO
COMPTON CREEK

53



Looking southeast, downstream from the Devil's Gate Dam on the Arroyo Seco toward the 210 freeway, Pasadena and the central Arroyo Seco.



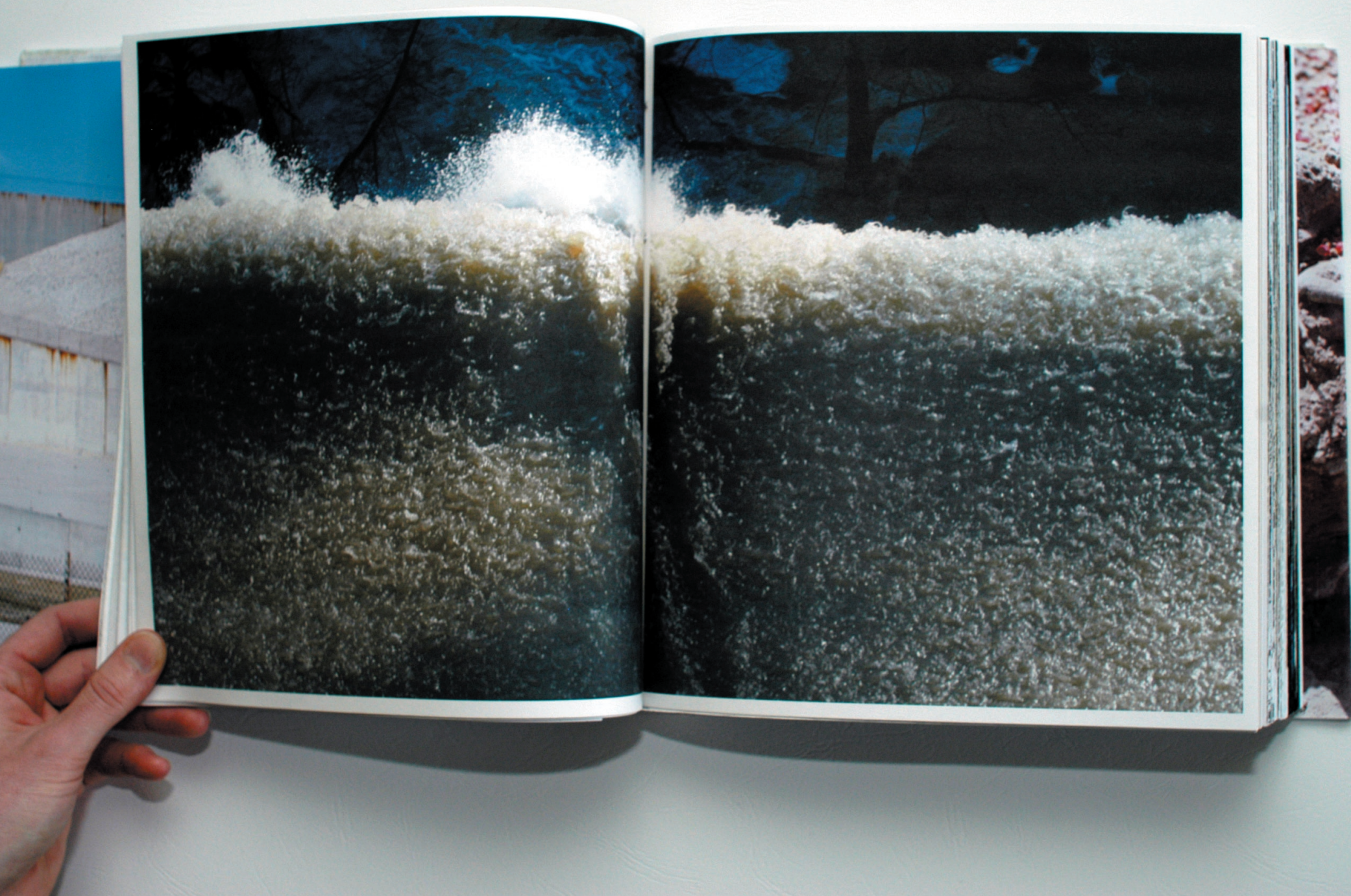
54

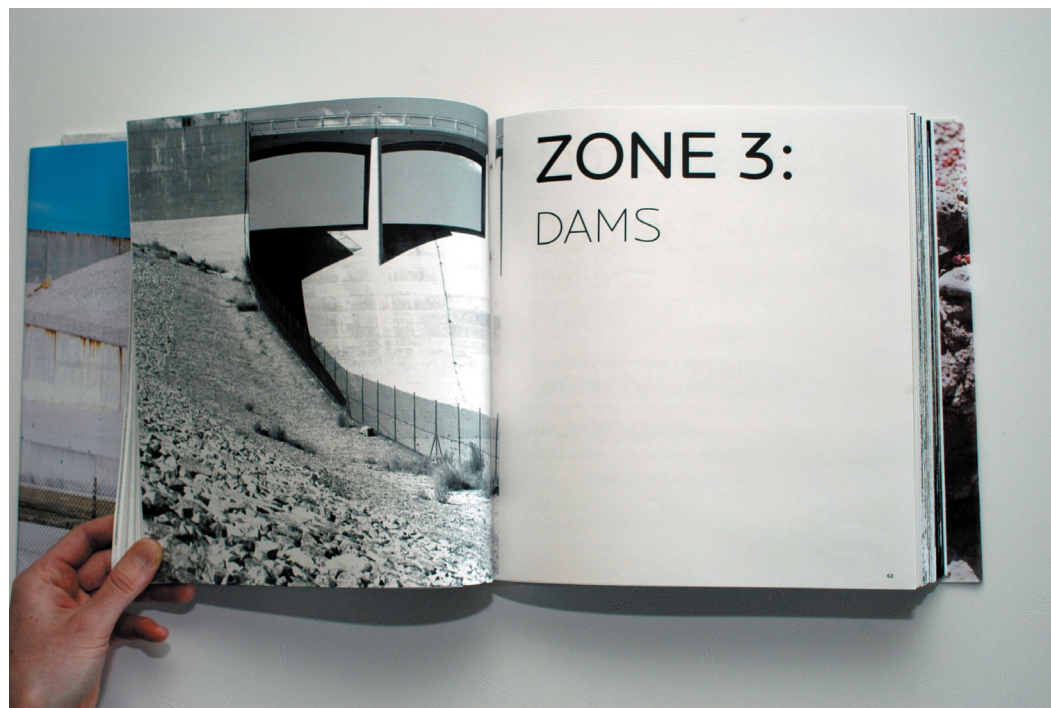


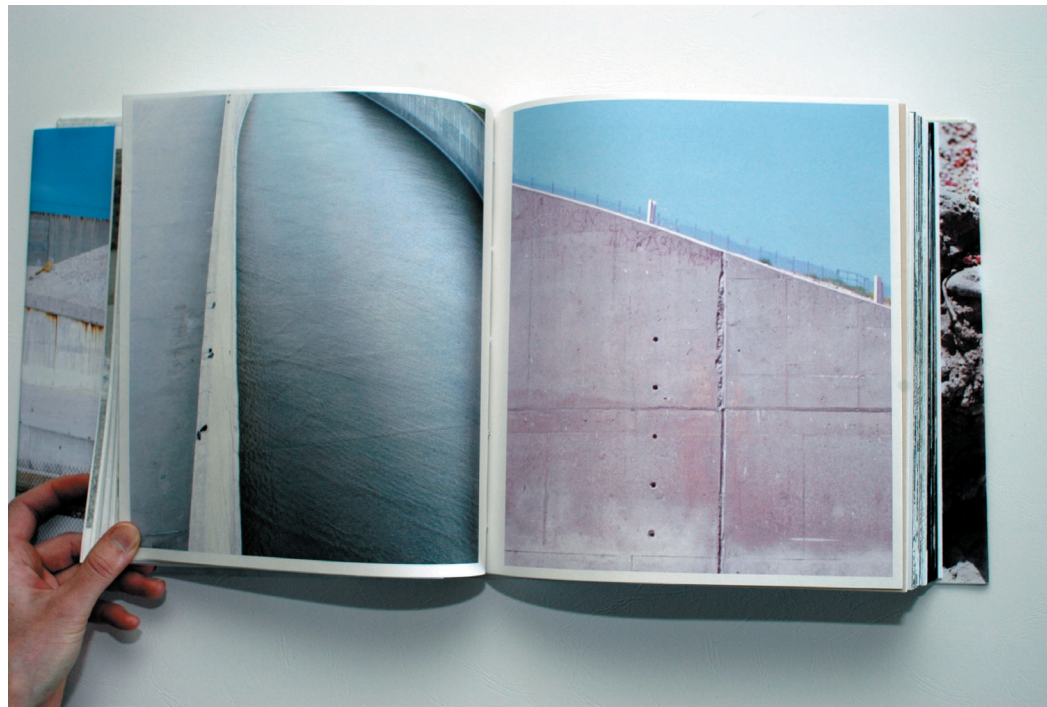
Looking northwest, upstream from the Devil's Gate Dam on the Arroyo Seco toward the Hahamongna Watershed, JPL and the San Gabriel Mountains.



Photos taken in January 2005. Note the flood waters that have engulfed trees in the Hahamongna Watershed behind Devil's Gate Dam.







ENGINEERING

LOCATION

Hansen Dam is located near the northern edge of the San Fernando Valley on Tujunga Wash, about one mile below the confluence of the Big Tujunga and Little Tujunga Washes, and about four miles southeast of the town of San Fernando. The boundary of the drainage area is formed by the San Gabriel Mountains on the north and west, and by the Verdugo Mountains and a secondary range of the San Gabriel Mountains on the south and east.

PURPOSE

The Hansen Dam is an essential element for flood control in the Los Angeles River drainage basin. In conjunction with Sepulveda and Lopez Dams, Hansen Dam is vital for the flood protection of the lower portions of the San Fernando Valley and the City of Los Angeles. Storage regulation given by the flood control basins permits efficient use of the Los Angeles River Channel.

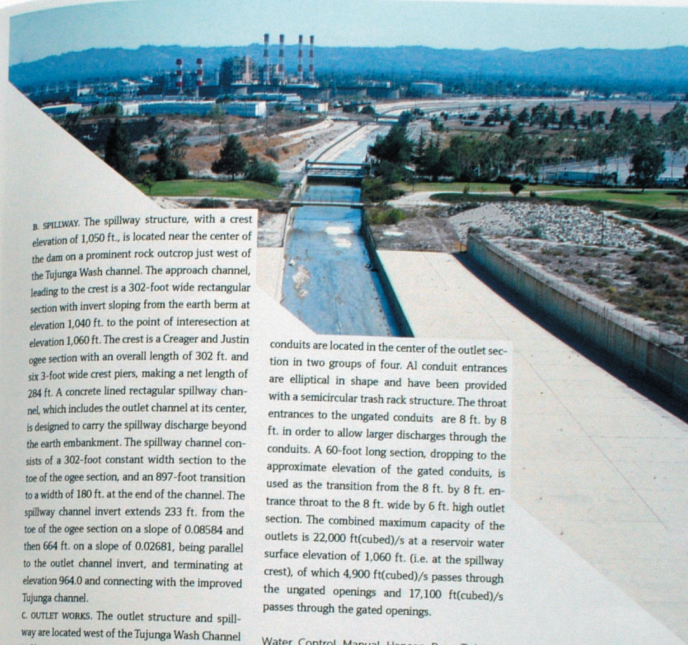
Currently, no facilities for the generation of hydroelectric power at Hansen Dam exist, nor are any contemplated. Furthermore, no navigation of any sort is possible or allowed in Hansen Reservoir or in Tujunga Wash, either upstream or downstream of Hansen Dam.

PHYSICAL COMPONENTS

A. EMBANKMENT. The dam is a compacted impervious earth fill structure. It is 10,475 ft. long at the crest (elev. 1,087.0 ft. NGVD, i.e. National Geodetic Vertical Datum of 1929). The maximum height above streambed is 97 ft. It extends in a general east and west direction at right angles to Tujunga

Wash. The axis of the dam follows a gentle curve in order to connect the abutments of the dam with a prominent rock outcrop located near the center of the dam. At the east end, the dam abuts against a range of small hills and on the west end the dam terminates on a gently sloping hill. Rock is exposed on the hillside at the east abutment and is found at shallow depths on the west abutment. Between the ends of the dam and the central rock outcrop, the axis of the dam crosses the lower end of a typical debris cone. The upstream face of the dam has a slope of 1V on 3H and is covered with a 2-ft. 6-inch layer of riprap over a 6-inch spill blanket. The downstream face has a slope of 1V on 6H from the rock toe to elevation 1,020, a slope of 1V on 5H from elevation 1,020 to 1,050, and a slope of 1V on 3H to the dam crest. Three berms, each 20 ft. wide, run parallel to the axis of the dam, one on the upstream face at elevation 1,040 and two on the downstream face at elevations 1,020 and 1,050 ft.

DEBRIS

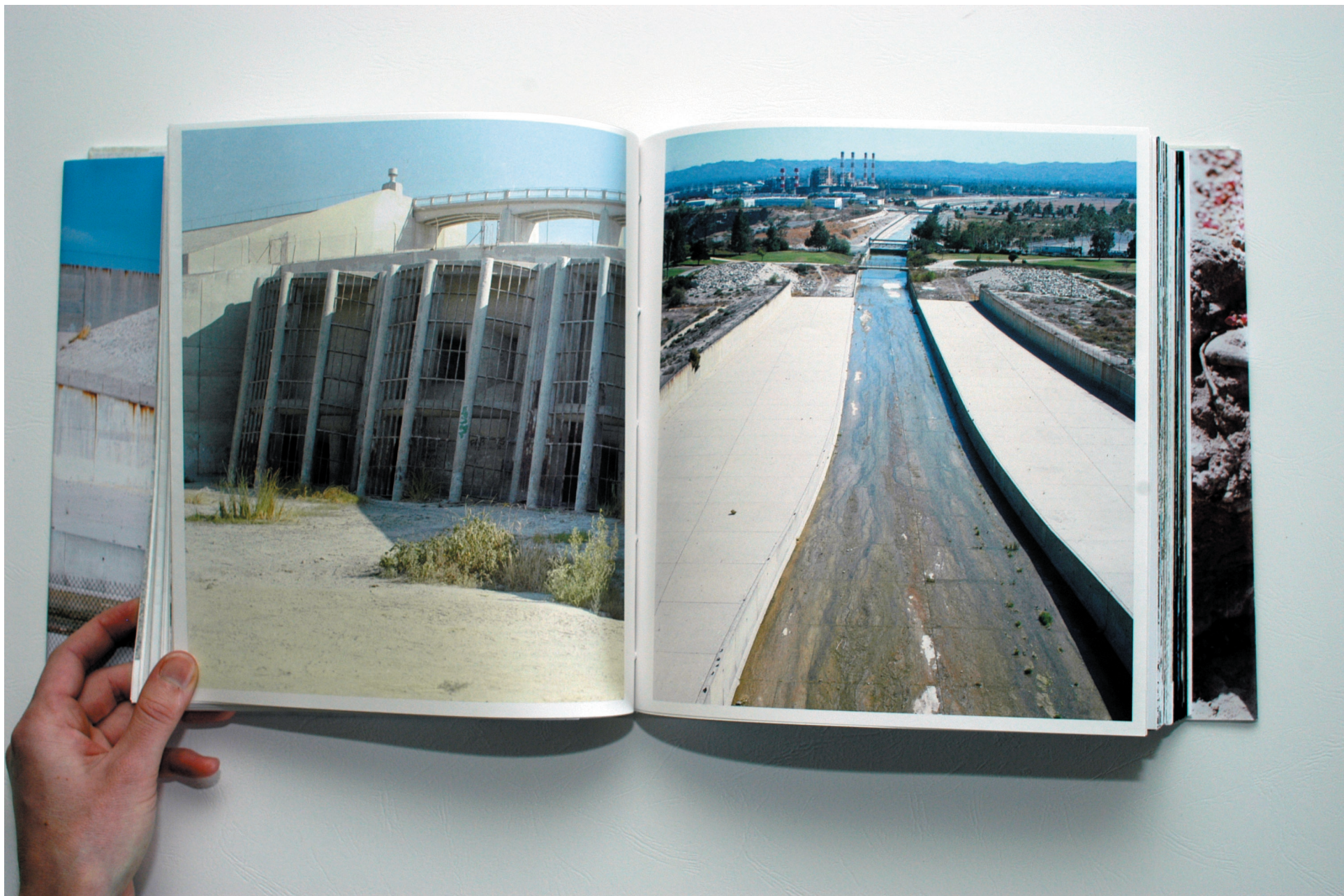


B. SPILLWAY. The spillway structure, with a crest elevation of 1,050 ft., is located near the center of the dam on a prominent rock outcrop just west of the Tujunga Wash channel. The approach channel, leading to the crest is a 302-foot wide rectangular section with invert sloping from the earth berm at elevation 1,040 ft. to the point of intersection at elevation 1,060 ft. The crest is a Creager and Justin ogee section with an overall length of 302 ft. and six 3-foot wide crest piers, making a net length of 284 ft. A concrete lined rectangular spillway channel, which includes the outlet channel at its center, is designed to carry the spillway discharge beyond the earth embankment. The spillway channel consists of a 302-foot constant width section to the toe of the ogee section, and an 897-foot transition to a width of 180 ft. at the end of the channel. The spillway channel invert extends 233 ft. from the toe of the ogee section on a slope of 0.08584 and then 664 ft. on a slope of 0.02681, being parallel to the outlet channel invert, and terminating at elevation 964.0 and connecting with the improved Tujunga channel.

C. OUTLET WORKS. The outlet structure and spillway are located west of the Tujunga Wash Channel in Hansen Knob, which is on the axis of the dam and approximately bisects it. The outlet structures include an approach channel, an intake structure with operating house and vent house, eight gated and two ungated outlet conduits, and an outlet channel. The outlet conduits are installed through the overflow spillway section, located symmetrically with respect to the spillway center line and aligned to discharge into Tujunga Wash. The gated

conduits are located in the center of the outlet section in two groups of four. All conduit entrances are elliptical in shape and have been provided with a semicircular trash rack structure. The throat entrances to the ungated conduits are 8 ft. by 8 ft. in order to allow larger discharges through the conduits. A 60-foot long section, dropping to the approximate elevation of the gated conduits, is used as the transition from the 8 ft. by 8 ft. entrance throat to the 8 ft. wide by 6 ft. high outlet section. The combined maximum capacity of the outlets is 22,000 ft³(cubed)/s at a reservoir water surface elevation of 1,060 ft. (i.e. at the spillway crest), of which 4,900 ft³(cubed)/s passes through the ungated openings and 17,100 ft³(cubed)/s passes through the gated openings.

Water Control Manual Hansen Dam Tujunga Wash, Los Angeles County, California, U.S. Army Corp of Engineers, Los Angeles District, Reservoir Regulation Section, November 1990, pp. II-1-II-2





Above:
View of the compacted earth fill Hansen Dam. Height
from trail to top of dam is about 97 feet.

Overall:
Left, Hansen Dam outlet works.
Right, from the top of the Hansen Dam looking south-
west toward the San Fernando Valley.

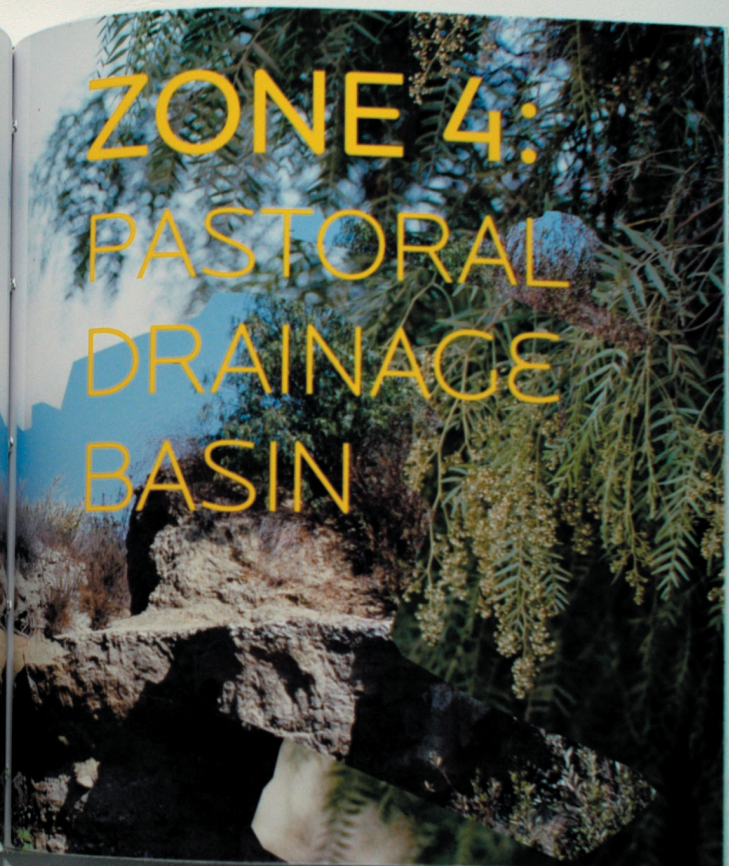



Above:
Water level rulers on Hansen Dam embankment.
Tujunga Wash channel just below Hansen Dam.

Below:
Two views of the Hansen Dam spillway.



ZONE 4: PASTORAL DRAINAGE BASIN





❖ The two new lakes—one for fishing and the other for swimming—are on a bluff not far from the old lake. On Saturday, an estimated 3,000 people celebrated the lakes debut with a free party that featured music, food and local politicians.

The oval fishing lake, which is open to paddle boats and rowboats, covers nine acres and has a maximum depth of 18 feet. The lake was initially stocked with 300 catfish and tilapia, and will be restocked as necessary. In the winter, trout will be released into the lake.

From "A New Oasis; Recreation: After 15 years of planning, the opening of two sparkling lakes at Hansen Dam gives residents a place to fish, swim and beat the heat"

The Los Angeles Times, August 29, 1999, pp. 1.

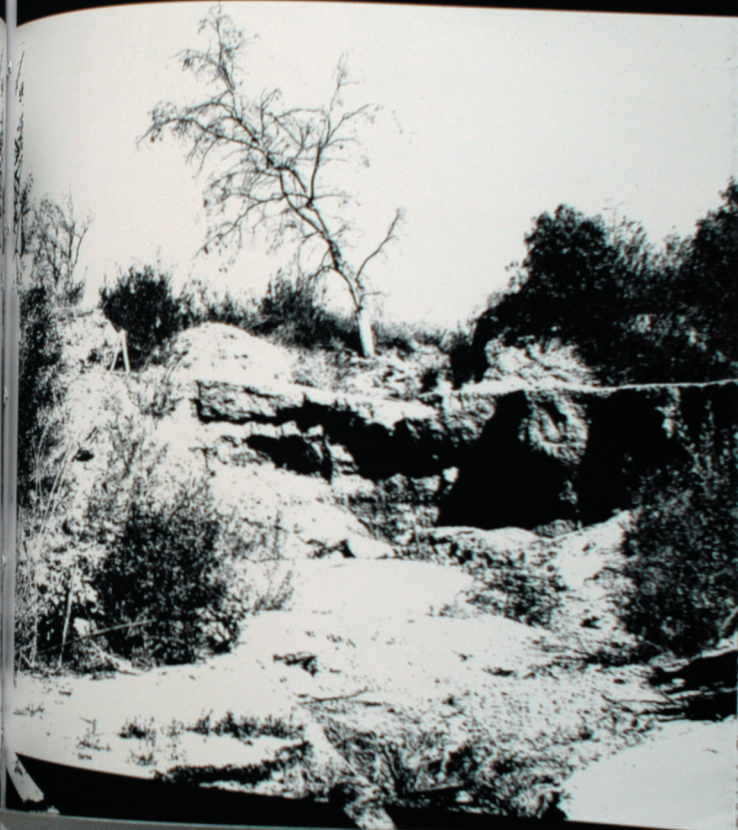


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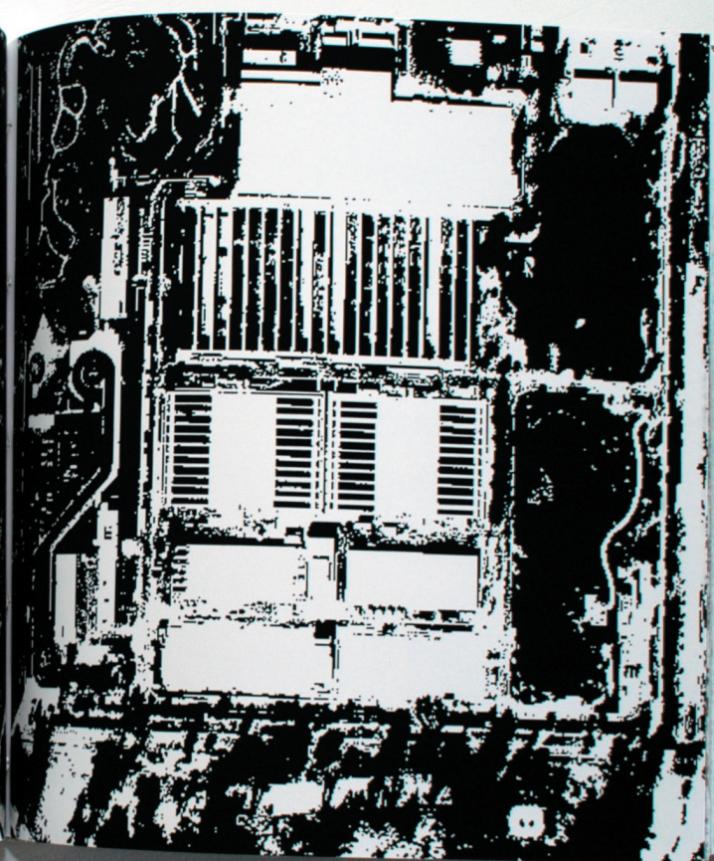
From "A New Oasis; Recreation: After 15 years of planning, the opening of two sparkling lakes at Hansen Dam gives residents a place to fish, swim and beat the heat"

The Los Angeles Times, August 26, 1999, D9-1







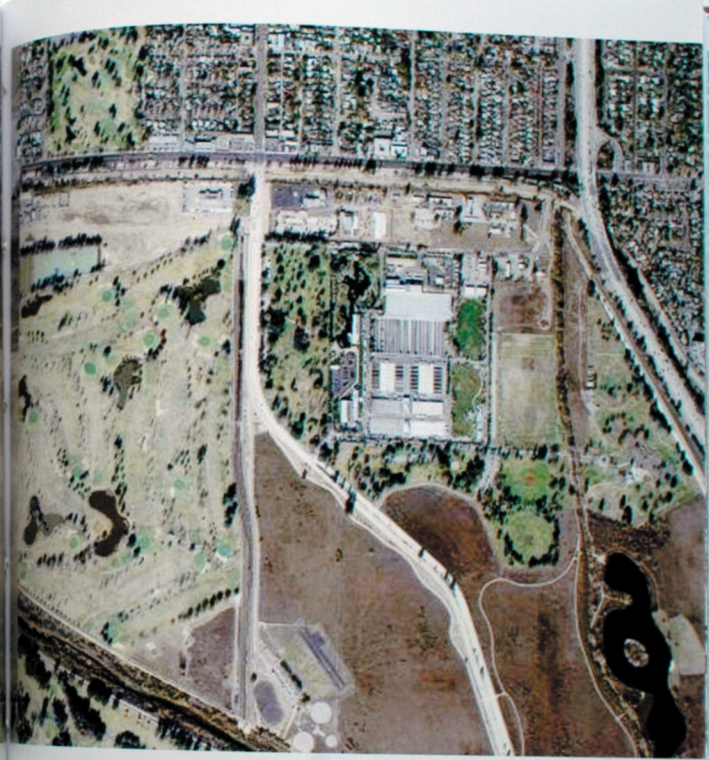
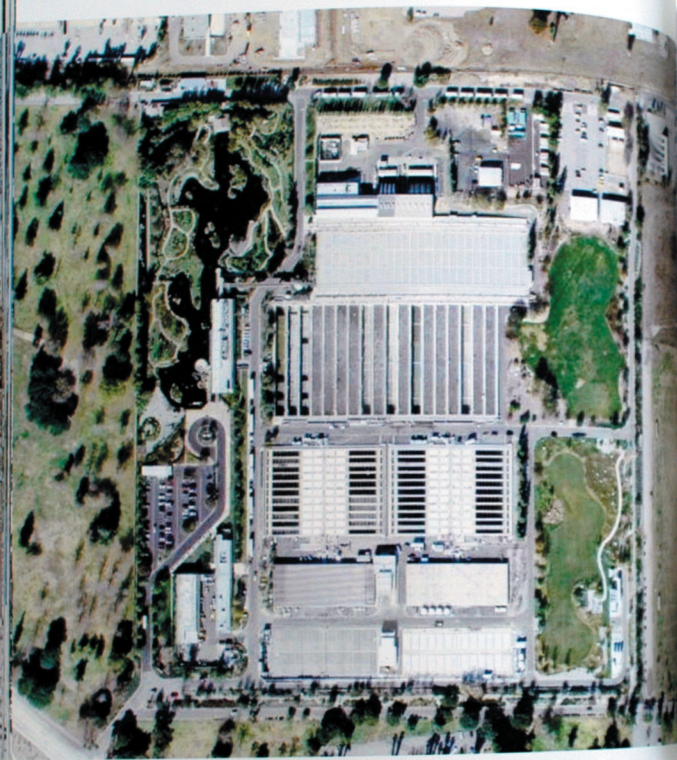


❖ Sewage treatment plants alone provide barely half of the dry season flow of the Los Angeles River.

The greatest single supplier is the Donald C. Tillman Water Reclamation Plant in Van Nuys, which began operation in 1984 and now provides about a third of the river's flow.

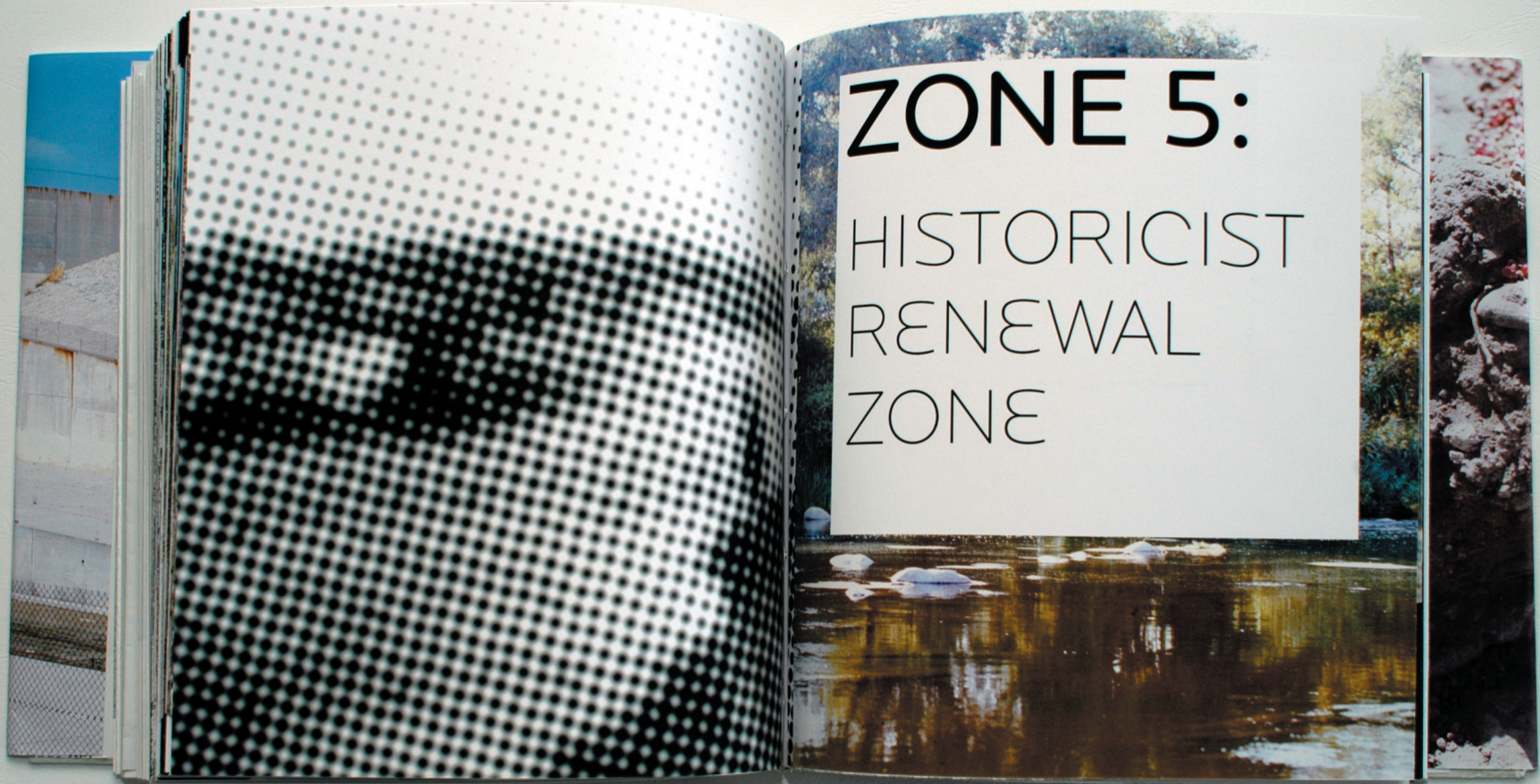
Consequently, the true "source" of the transformed Los Angeles River is not some mountain stream in the Santa Susana or San Gabriel Mountains. Rather, it is the huge concrete treatment tanks that clean the city's wastewater and discharge it into an outflow channel that empties into the river just upstream from Sepulveda Dam.

From Water Control Manual Hansen Dam
Tujunga Wash, Los Angeles County, California,
U.S. Army Corp of Engineers, Los Angeles District,
Reservoir Regulation Section, November 1990,
pp. II-1-II-2









ZONE 5:

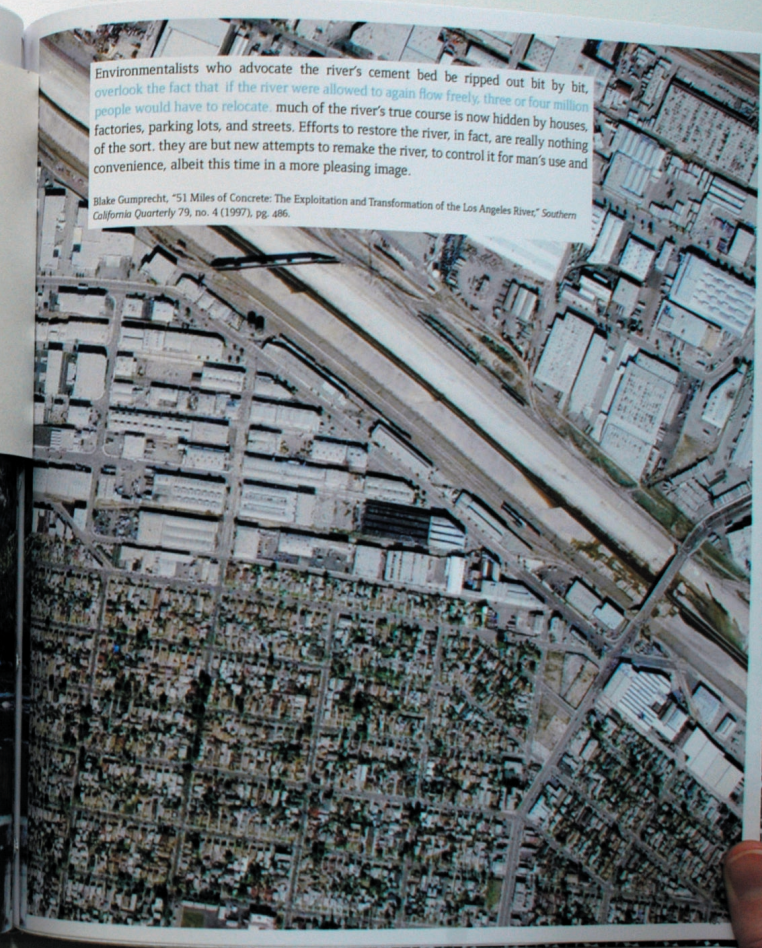
HISTORICIST
RENEWAL
ZONE





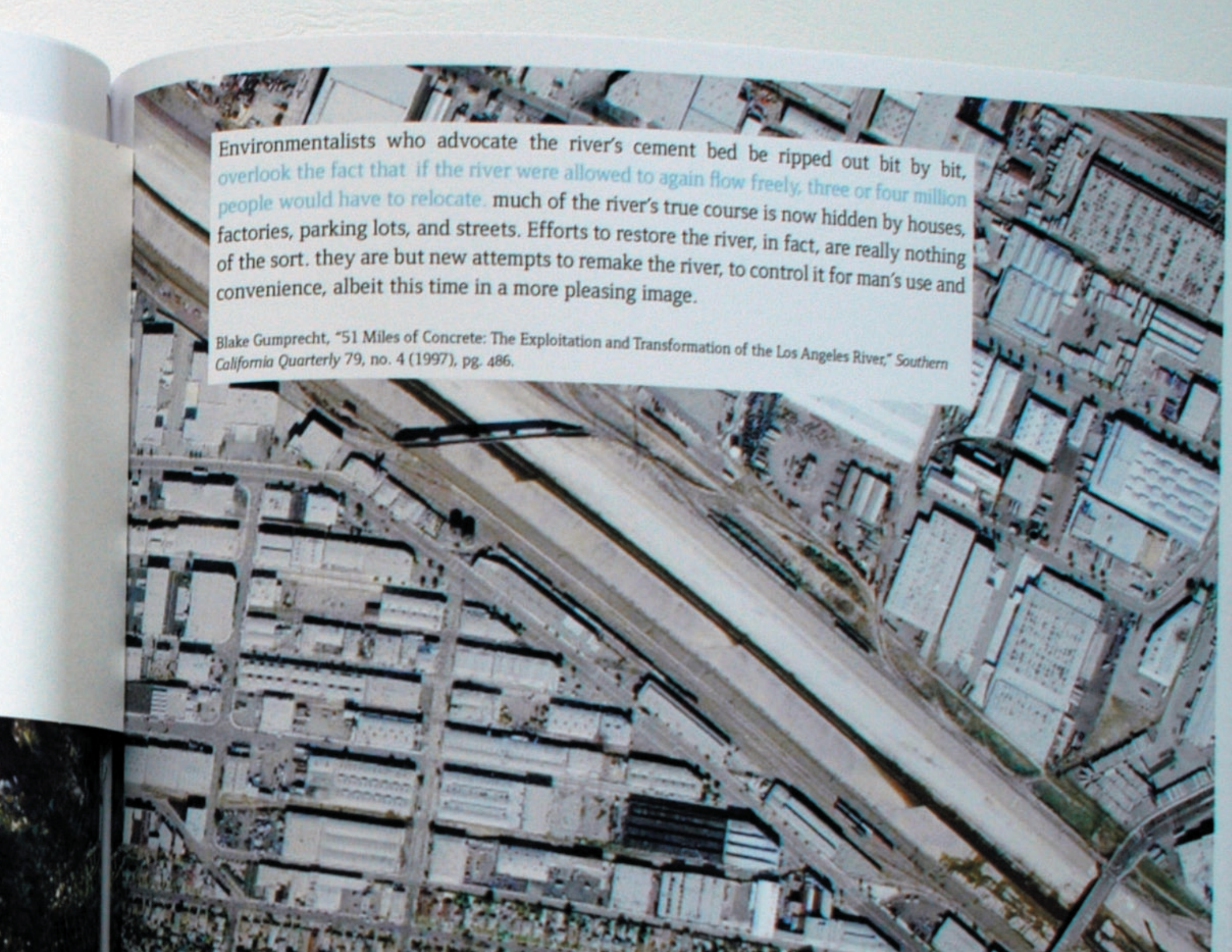


Downey Avenue Bridge, destroyed in 1886 floods.
A street car and railroad depot had fallen into the river.



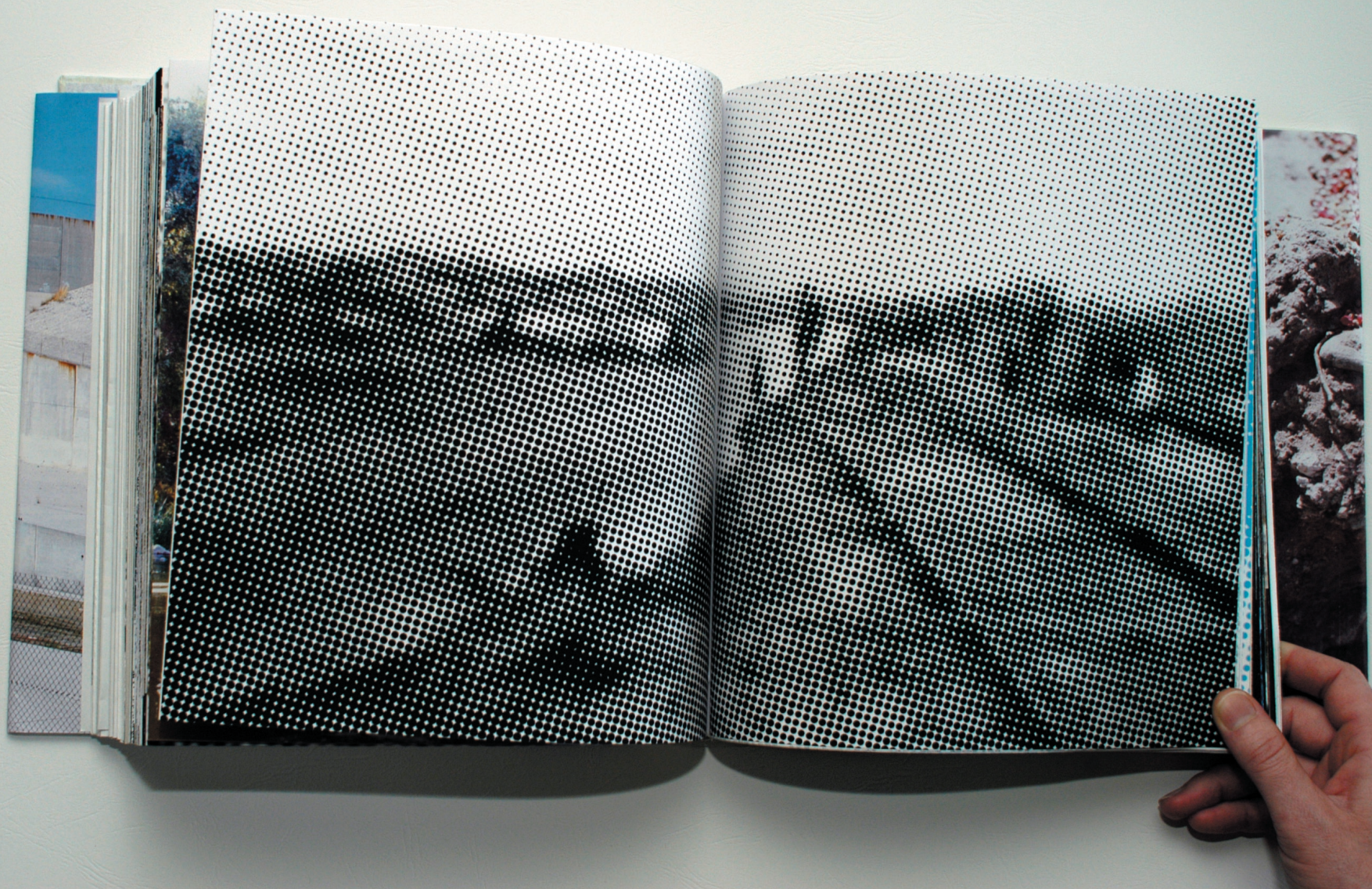
Environmentalists who advocate the river's cement bed be ripped out bit by bit, overlook the fact that if the river were allowed to again flow freely, three or four million people would have to relocate. much of the river's true course is now hidden by houses, factories, parking lots, and streets. Efforts to restore the river, in fact, are really nothing of the sort, they are but new attempts to remake the river, to control it for man's use and convenience, albeit this time in a more pleasing image.


Blake Gumprecht, "51 Miles of Concrete: The Exploitation and Transformation of the Los Angeles River," *Southern California Quarterly* 79, no. 4 (1997), pg. 486.

An aerial photograph showing the Los Angeles River as a wide, light-colored channel cutting through a dense urban grid. The river is flanked by numerous buildings, streets, and parking lots, illustrating the text's point that the river's true course is now hidden by human development.

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Blake Gumprecht, "51 Miles of Concrete: The Exploitation and Transformation of the Los Angeles River," *Southern California Quarterly* 79, no. 4 (1997), pg. 486.





In 1927, the Los Angeles Chamber of Commerce had commissioned the nationally renowned planning firms of *Olmsted Brothers and Harland Bartholomew and Associates* to develop a comprehensive public parks and recreation plan to address what was coming to be widely perceived as a near-crisis shortage of such amenities in the area.

That 1930 report, *Parks, Playgrounds and Beaches for the Los Angeles Region*, outlined a \$124 million proposal to use the county's land-use regulatory and landownership authority to meet the parks and recreation crisis. The planners observed that urban growth was destroying the very scenery and recreational opportunities that had made Los Angeles attractive in the first place. They also contended that unfettered urban development along the rivers raised property values in flood-prone areas, making flood control both expensive and difficult.

Orsi, *Hazardous Metropolis*, 105.

Olmsted and Bartholomew emphasized in their report that flood control could be accomplished by different combinations of land use planning and public works. They wanted to conserve broad natural channels in which storm waters could spread, irrigating and fertilizing the riverside landscapes that out of flood season would serve the public as nature preserves, recreational parks and scenic parkways.

The opposing solution was to deepen and "armor"—that is pave—a narrow width of the river's channel in order to flush storm runoff out of the city as efficiently as possible, and thus allow extensive industrial development within the plain. Beneficial to large landowners, this strategy would force the natural river into a concrete straightjacket—destroying the riparian ecology and precluding use of the riverway as a greenbelt.

Davis, *Ecology of Fear*, 69.

To the distress of many chamber leaders, however, the planners also proposed to create a new governmental authority that would have sweeping powers to raise money and purchase and develop property for parks, roads, flood control, and other infrastructure. Apparently fearing the new authority would infringe on their own informally exercised power, the chamber's directors reduced the print run of the report from seventy-five hundred to two hundred copies in an effort to prevent the rise of public support for the plan.

The report also ran afoul of a political culture that worshipped growth and development. The Olmsted and Bartholomew parks and flood-control plan not only proposed to enlarge municipal property ownership and create a new agency to manage it; it also advocated the use of hazard zoning to control riparian real-estate prices. Here the chamber's leaders balked at what they perceived as a radical threat to future property development in Los Angeles.

Orsi, *Hazardous Metropolis*, 106.

THUS A POTENTIALLY EFFECTIVE FLOOD-CONTROL
TOOL BECAME A PATH NOT TAKEN.



PLATE 16. General plan for a complete system of parkways and large parks for the Los Angeles Region. (Base map by courtesy of Automobile Club of Southern California.)



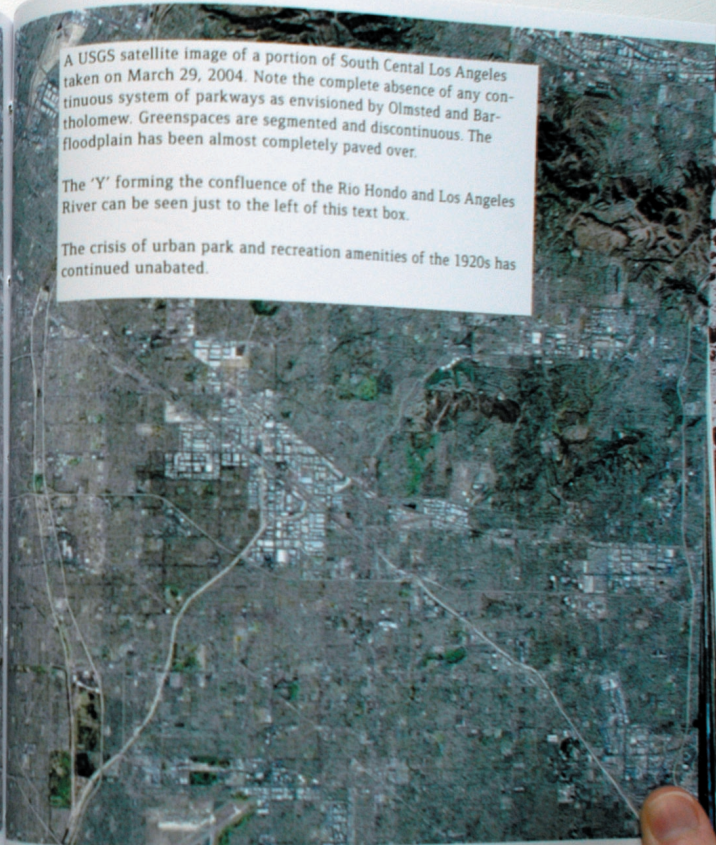
A map of the 1930 Olmsted and Bartholomew general plan for a complete system of parkways and large parks in the Los Angeles Regions. Parkway are in red, parks are in green.



A USGS satellite image of a portion of South Central Los Angeles taken on March 29, 2004. Note the complete absence of any continuous system of parkways as envisioned by Olmsted and Bartholomew. Greenspaces are segmented and discontinuous. The floodplain has been almost completely paved over.

The 'Y' forming the confluence of the Rio Hondo and Los Angeles River can be seen just to the left of this text box.

The crisis of urban park and recreation amenities of the 1920s has continued unabated.

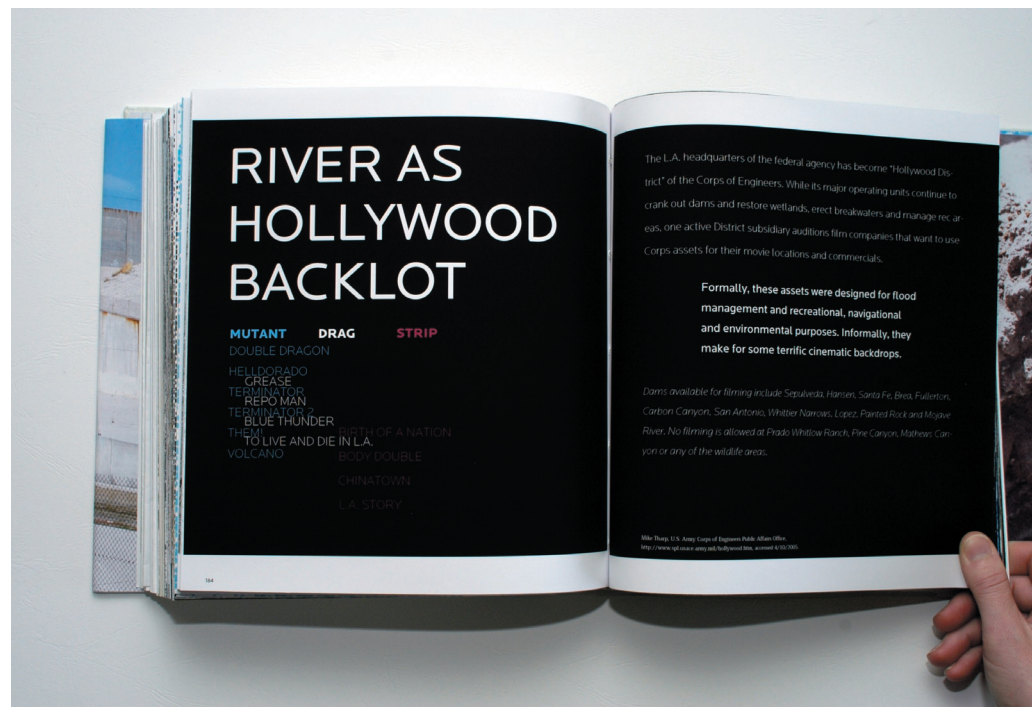




ZONE 6:

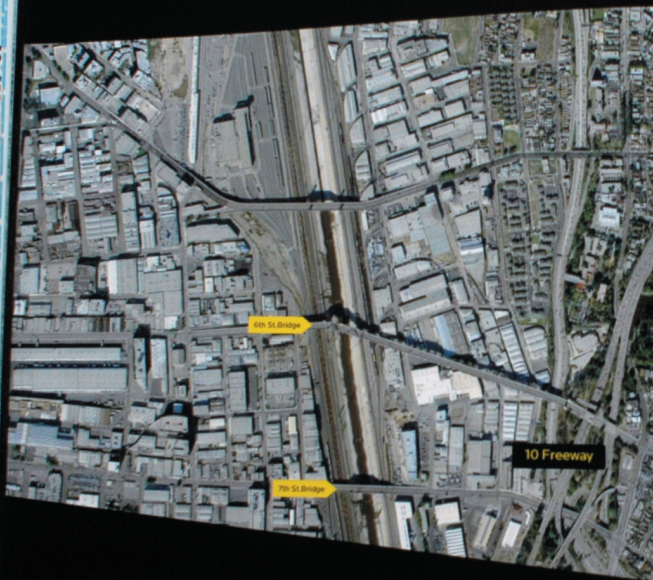
MUTANT DRAG STRIP ZONE







THE BACKLOT



6th St. Bridge

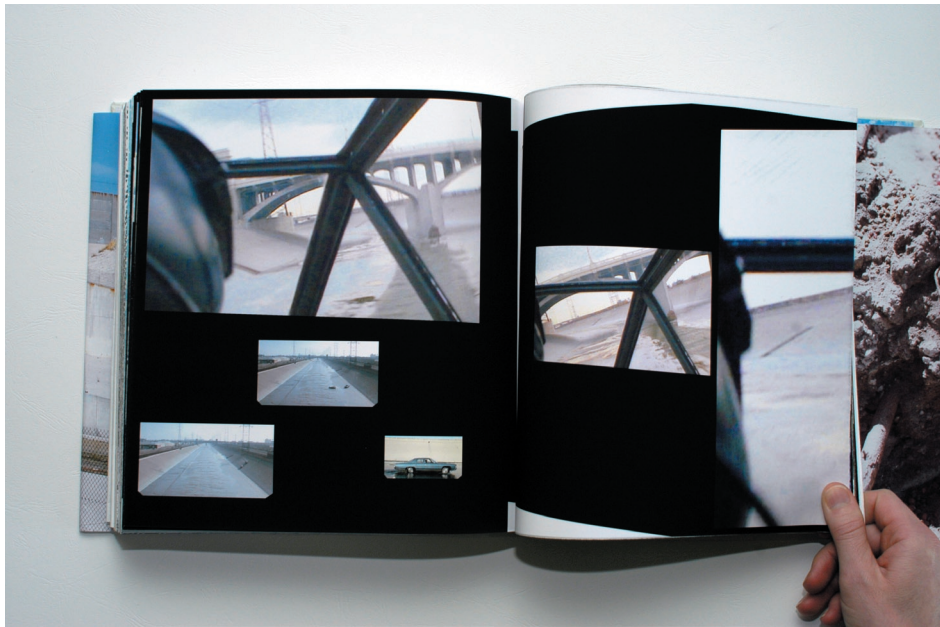


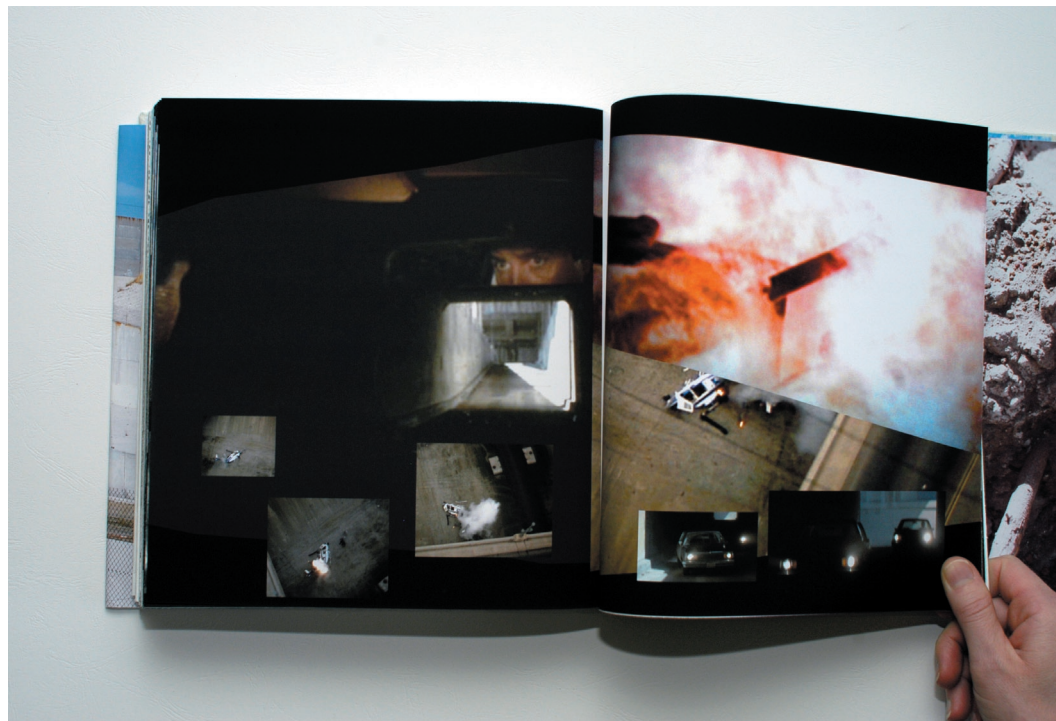
By far the most popular location for filming on the Los Angeles River is in the vicinity of the 6th Street bridge, smack dab in the middle of one of the most industrial segments of Los Angeles. Adjacent to the 10 freeway, myriad railroad yards and an endless system of drainage tunnels, many a car chase has ended (or passed through) this section of the concrete culvert.

THE META-CAR CHASE

COMPILED FROM SIX MOVIES CONCERNING CRIMINALS,
MUTANTS, AND OTHER DEVIANTS









ZONE 7:
(SCIENCE)
FICTION
RENEWAL
ZONE





HELLO AMERICA
J.G. BALLARD

CHAPTER 20
WAYNE'S DIARY: PART II

NOVEMBER 23. BEVERLY HILLS HOTEL, LOS ANGELES

MANSON FINALLY APPEARED YESTERDAY! HE MATERIALISED OUT OF THE HUMID LAS VEGAS SKY LIKE A DISTRACTED ANGEL, AT THE START OF AN EXHILARATING THREE-DAY TRIP TO CALIFORNIA. SOON AFTER BREAKFAST IN MY SUITE AT THE SANDS –

QUAILS' EGGS,
TRUFFLES,
RASHERS OF WILD PIG

(The forests around Vegas teem with game, everything from marmosets and mandrills to snow leopards and scarlet ibis, all escapees from the southern California zoos),

There was an enormous racket through the ceiling, as if the whole hotel was rising from its launchpad. **Manston's** sea-king had landed on the reinforced roof. An ambulance chopper, with the presidential seal on the fuselage, piloted by Paco himself, taking a day off from the flying school.

A message came down on the intercom, in **Manston's** strange, dissociated voice, inviting me to join him on an inspection tour of the reclamation projects in Los Angeles. I promptly rode the elevator to the roof, crouched through a blizzard of orchid petals driven up from the jungle below, and climbed into the front cockpit beside Paco. Manson was sitting behind a glass partition in a peculiar fisherman's chair that pivoted from the port to starboard windows.

He looked very Presidential in a fawn safari suit, an eccentric landowner out for a day's shooting.

Already waiting for us in the sky above the centre of Vegas was our armed escort, two pilotless helicopter gunships operated by Paco, their control settings matched to the Sea-King's.

We formed up and set off at a fast pace towards the south-west, soon left Vegas behind, an overlit crown burning a hole in the jungle. Paco kept to about 300 feet above the tree-tops, the gunships soaring along on either side. We soon reached the California/Nevada border, headed on towards

THE MOJAVE DESERT.

Below us was the unbroken forest canopy, densely packed trees divided by the concrete highways. Strange to think that this was ocean and desert. An immense Amazon rain-forest now stretches its green shoulders down from the mountains to the coast. Death Valley has bloomed into a horticulturalist's paradise. As we came off Interstate 15 and descended towards Glendale, I could see the upper floors of the taller office blocks and apartment houses rising above the foliage.

Now and then, below the canopy, I caught a
glimpse of the dawn world,
of the forest floor,

a shadowy realm of suburban stores and houses split
Everywhere fast jungle rivers carved their way towards
cutting deep ravines through the old shopping malls
heading for the great new delta of the Los Angeles River
water-logged channels a mile in diameter.

Strange to see the Watts Tower's standing on a sm
either shore. The Queen Mary sits in a sea of silt, d
from its funnels to the Plimsoll line.

The first sight of the Pacific ocean moved me in a deep sense, this huge, rain-heavy vat steaming like an infinite java sea. At last I had crossed America! I looked round and **Manson** gave me a cheery thumbs up.

We tracked the course of the Los Angeles River. It curves down through Burbank and Glendale, then follows the line of the Hollywood and Harbour freeways towards Long Beach. Paco pointed out its two main tributaries, the Bel Air River and the Hollywood River, both strong


brown channels

a hundred feet across, fed by the hot Pacific rain and the thousands of

leaking swimming pools.

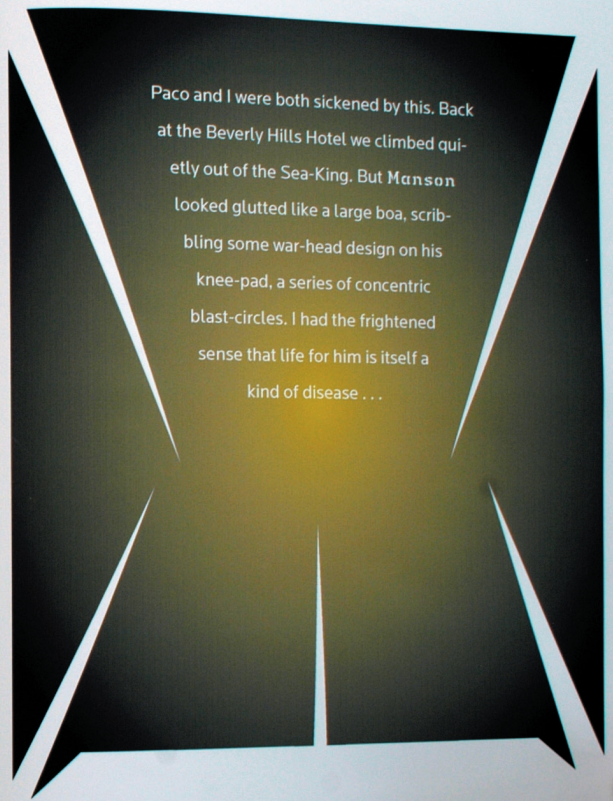
Most of these are slime-green tanks crammed with water-lilies, nesting places for flocks of cranes and flamingos. As we circled over the San and Beverly Hills I could see alligators sunning themselves beside the swimming pools, while elegant birds stood on the ends of diving boards, waiting for some talent scout to film them as they stared non-charitably at the overgrown gardens of the abandoned mansions.

From the air Los Angeles had become sight. The great freeways are linear gardens, tapestries of Spanish moss a thousand yards long hanging from the concrete overpass-ies. A huge colony of spider monkeys has taken over the Hollywood Bowl, an army of them bickered and fought like a bored audience, then sat up together as we soared past. Sloths hang from the loops of Magic Mountain, trapping themselves in the Mibbus drips of the scenic railway. Palm trees rise through the crown of the Brown Derby, pursas prowl the corner of Hollywood and Vine, waiting for unwary tourists, hyenas and jackasses have left their footprints in the silt outside Murn's Chinese Theatre.




suddenly the gunships were veering and banking on either side of us, gatlings blazing, waist-guns pouring fire into the flocks of helpless birds. *The air was a whirlwind of noise and bloody feathers, thousands of bits of flamingo spattered on to the forest canopy like pink spray from a gun.*

But Manson wasn't satisfied, for the next hour we swerved in and out of the hills and valleys' massacring anything that moved—deer grazing peacefully on the Paramount back lot, a herd of llamas quietly eating the vine-leaves above a filling station on Ventura Boulevard, even a bull elephant trying to defend his small herd bathing in a Bel Air hotel pool. The female and her young luckily escaped into the forest, but the bull died in the bloody pool, still trumpeting in the boiling red water as the gunships circled around him like crazed sharks.



Paco and I were both sickened by this. Back at the Beverly Hills Hotel we climbed quietly out of the Sea-King. But Manson looked gluttoned like a large boa, scribbling some war-head design on his knee-pad, a series of concentric blast-circles. I had the frightened sense that life for him is itself a kind of disease . . .



March 1938: A week of heavy rain flooded 31,511 acres in Los Angeles including Venice, where these two boys hitched their surfboards to a car. The San Fernando Valley suffered the worst damage, turning Van Nuys temporarily into an island.



