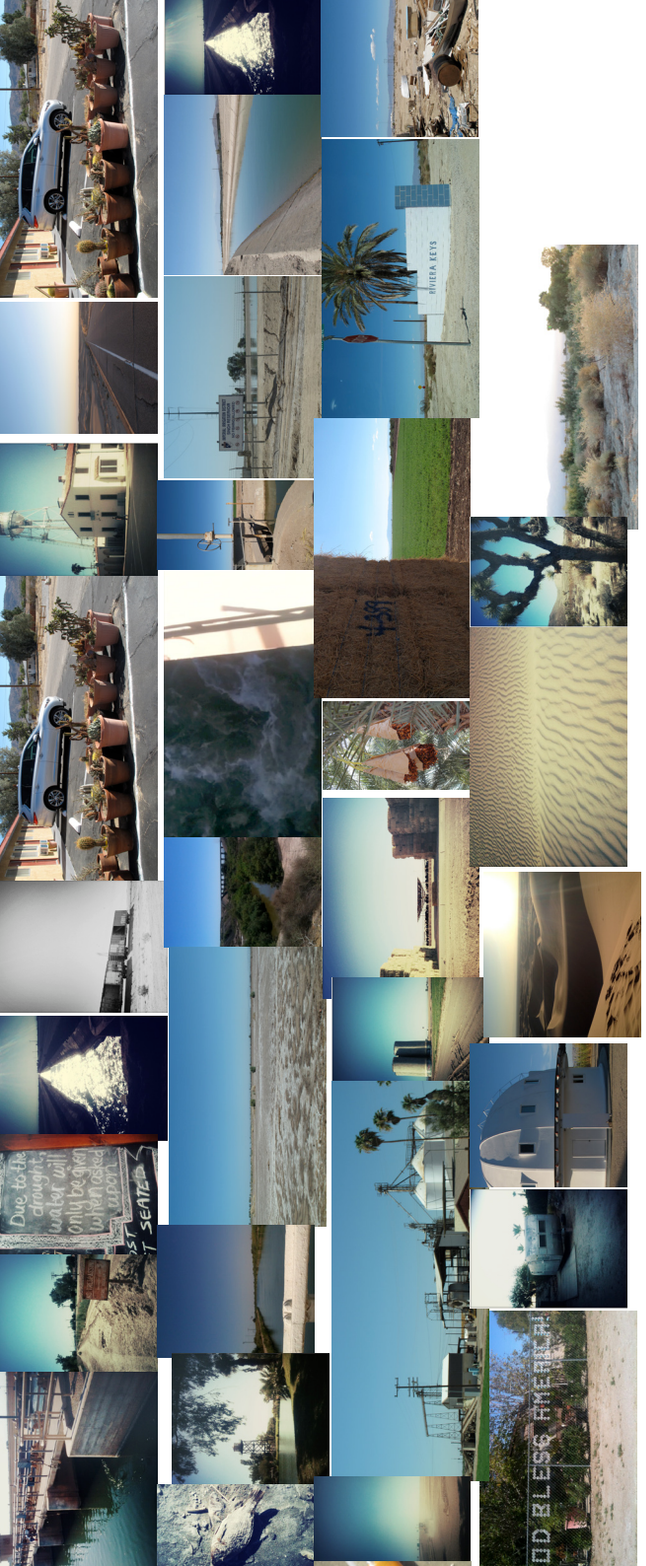

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from the arid ground up

_in search of water constructions in the Salton Sea area

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From the Arid Ground Up: In Search of Water Constructions in the Salton Sea Area
Upp från den torra marken: Att leta efter Vattenkonstruktioner i Salton Sea området

Linn Stevensson

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Just Trying to Make Things a bit Pretty
Parking lot in Joshua Tree, Mojave Desert, California
September 2014

Preface:

Encounter with Arid Grounds

In the late summer of 2014, I for the first time set foot on the American west coast. A stranger to these lands, seeing photos, studying maps, reading facts and fiction could in no way have prepared me for what was to come during this first encounter with some of the Great American Deserts. Being "off season", meaning hot as hell itself, me and my travel companion drove for miles and miles. While cursing the heat, we were completely blown away with the beauty and strangeness of the arid lands.

And yet there was so much more to it than the physical land itself. Constructed landscapes, formed over years of entangled relationships between humans and the ground. The land was telling stories of complexity of power, capitalism and land use that was hard to shake off. Deeply exploited landscapes, worked and inhabited by sometimes deeply exploited people. I discovered that the desert is a diverse place people choose to use and inhabit for various purposes. Desert as a waterscape, wastescape, minescape, farmscape, militaryscape, energyscape, artscape and, wildscape - travelling through the arid lands of the Salton Sea area I was struck by the extent to which the desert is used as a resource. I was intrigued to understand the landscape as a highly political space, a place for negotiation and a constant subject to change - now and over time - in order to enable life in these harsh surroundings.

Malmö/California

Thanks!

Lisa Diedrich, my supervisor, for encouraging me to follow my nose during this process, and for all support along the way. Also my deepest thanks for constantly widen my horizon within the international field of landscape architecture.

Aurora Tang, at CLUI - Center for Land Use Interpretations, Los Angeles and the HDTS - The High Desert Test Sites, Joshua Tree, for generously providing with me contacts, access to the CLUI archive and for guiding me on site in Joshua Tree.

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Andrea Zittel, for permission to visit the premises of AZ West, Joshua Tree.

The people of the Salton Sea area, for sharing their stories and landscape with me. Especially a warm thanks to Quinn, Sam at the Desert Motel in Brawley, Carter Taylor at Lidco Inc, Chris at Coachella Valley Brewery Company, and Clark Moorten at Moorten Botanical Garden, Palm Springs.

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Alexander Henriksson, for great talks and layout advises.

Martin, for being my constant travel companion, in the Californian deserts, and in life.

Water in the urban landscape
Calexico, California
August 2014

Abstract:

From the Arid Ground Up:
In Search of Water Constructions in the Salton Sea Area

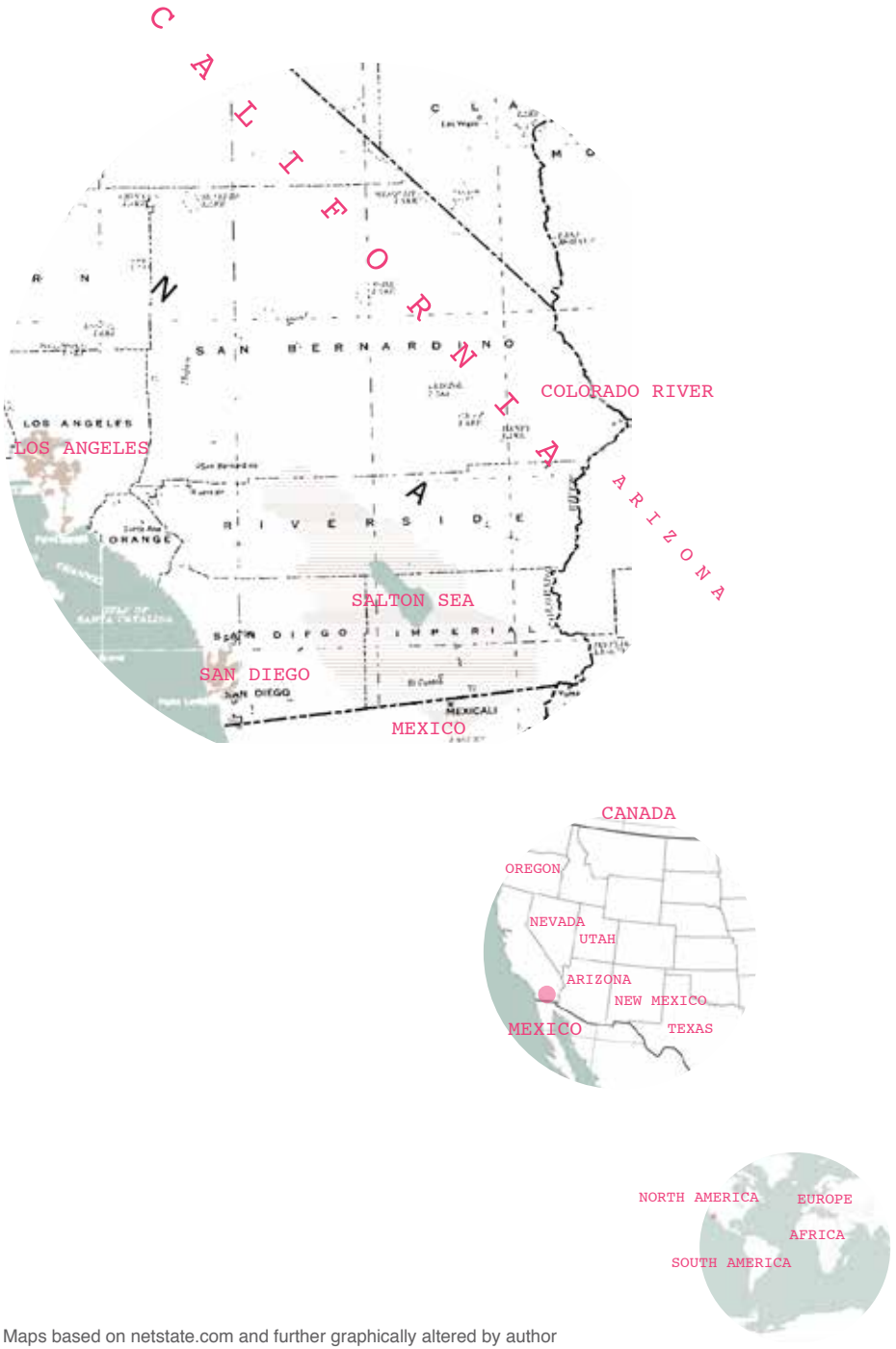
This thesis explores constructed water landscapes and the attitudes creating them in the Salton Sea area, which is located in the converge of the Mojave and the Sonoran Deserts in southeast California. With the focus on water constructions the thesis embraces the method of the Deviant Transect, under development by the landscape architect researchers Gini Lee and Lisa Diedrich, with Ellen Braae. The method aims at enabling designers to capture qualities that can only be perceived on site, such as dynamics, relationships and atmospheres, in order to support site-specific transformation of sites.

This thesis challenges Antropocentrism, inspired by writings of Dirk Sijmons (2014) and Saskia Sassen (2014). Amongst others, Carol J. Burns and Andrea Kahn's (2005) theories on site and site specificity, are studied, along with literature on grass root movements and societal change suggested by Grace Lee Boggs (2011) .

This work examines water constructions in the Salton Sea area, acknowledging them in two ways: as land colonization with themes such as water systems, industrial scaled farming, and sub-urban settlements, and as oppositions to conventional land use practices, with themes of the desert as a garden, local food, and the culture of mobile homes.

The resulting findings are the basis for a design proposal that acknowledges what is already in place by introducing a network of test sites. The aim is to use landscape architectural skills in order to engage in a speculative form of regional design, enabling visionary organizing rather than providing finished blueprints.

Content:



Maps based on netstate.com and further graphically altered by author

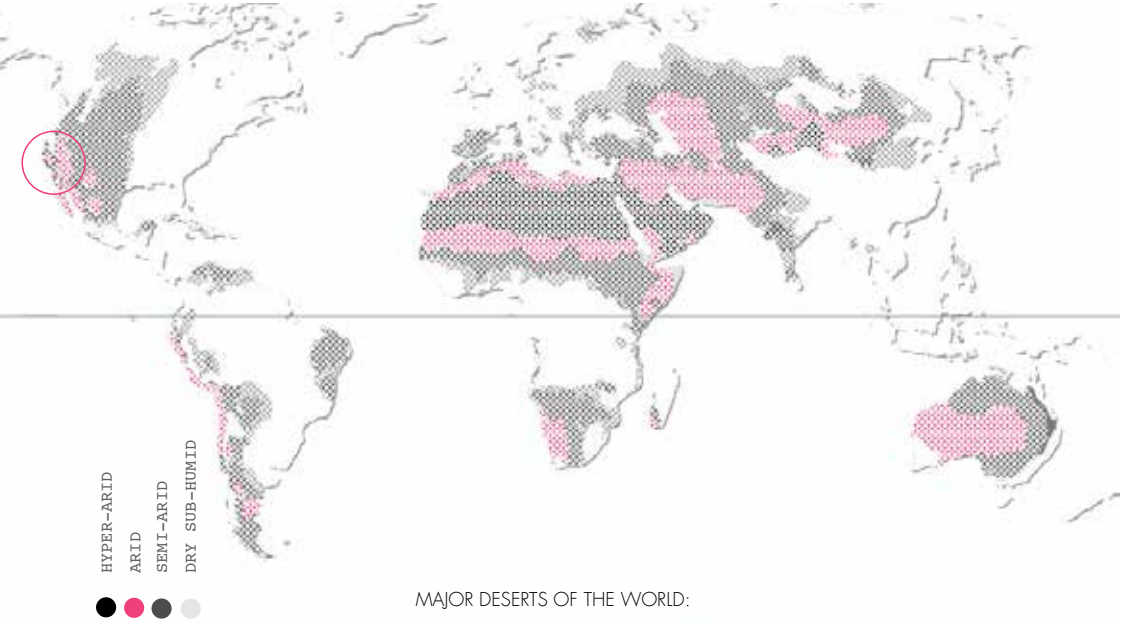
Introduction:

Research Design

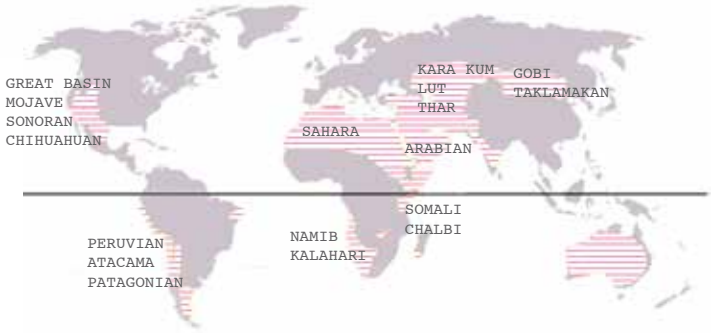
Problem Background

We are living in times of change. Climate change, increasing populations to feed, renewed ecological responsibilities and increasing urbanization are factors all affecting our landscape. Human engineering skills have made it possible to inhabit desolate places in new manners, with high demand on landscape performance and resources.

In the Salton Sea area, located in southwest California, these challenges and demands are clearly visible. In the arid desert landscape water systems have been engineered and designed to enable the area to be a part of the backbone of California's booming agriculture. The agri-business is supplying large parts of America with food and a substantial amount of crops is being produced for export on the global market. The rapidly increasing urbanization is also putting pressure on the water supply. This deceiving abundance of water is now at question as constant overdraft from aquifers is draining the underground, and imported water supplies are diminishing. To make matters worse California has for a number of years been facing a severe drought, partly due to historic low yearly snowmelt. Water is the foundation for life and the systematic organizer of the arid landscape. The issue of limited water supplies in arid lands is relevant on a transitional scale – local to global – forcing us to question prevailing practices.



MAJOR DESERTS OF THE WORLD:



ARID LANDS & MAJOR DESERTS

The Salton Sea area is located in one of the most arid places in the world, in the intersection of the Mojave and the Sonoran Desert, in a part commonly named Colorado Desert.

Maps based on Stewart 2005, and http://4.bp.blogspot.com/-hM8I8KDDw/UUqo_wj39EI/AAAAAAAAEHg/-pQSLlyfERo/s1600/Screen+shot+2012-11-07+at+11.29.25+AM.png and further graphically altered by author

Aim & Research Question

The purpose of this thesis is to study constructed landscapes of the Salton Sea area. This is because I am interested in learning what attitudes are related to the water use that produces these landscapes, in order to identify those attitudes and sites that are able to become driving forces towards a more sustainable use of water in the area. I am asking how to translate these driving forces into scenarios of a living landscape also in the future?

The work is constituted in first preparing the terrain - using situated knowledge of writing and analytical fieldwork. As a designer I then use design skills as a way of focusing on the how, engaging in a speculative form of regional design, enabling visionary organizing.

Methods

The Deviant Transect

The fieldwork carried out in the Salton Sea area is based on the method of the Deviant Transect, under development by the landscape architecture researchers Gini Lee and Lisa Diedrich (with Ellen Braae). The method aspires to enable designers to better capture situational qualities of sites in order to support transformation of that which exists rather than imposing universal design-based solutions (Diedrich et al. 2014). The Deviant Transect method requires travelling, and is inspired by Alexander Humboldt's method of transareal travelling and his scientific approach of regarding science as mobile, moving across both interdisciplinary and geographical boundaries and territories. The transareal approach is to be understood as

a way of exploring a particular geographical and cultural area from the perspective of experience of another place (Diedrich et al. 2014). By pursuing the method of a deviant transect the focus is on uncovering relational, dynamic and atmospheric relationships while actually being on-site.

The method is constituted in three phases: the pre-travel, the on-site, and the post-travel. In the pre-travel phase a travel itinerary is prepared. With the help of google searches, literature study, clues from people with insight etc. a tentative travel schedule is made in the form of a transect line, which is then followed. The line connects points of landscape that promise the possibility of capturing situational qualities of site, such as relational, dynamics and atmospheres (Braae et al. 2013, p 195). The line is drawn according to information available from maps about how to travel across the site. On-site, unforeseen obstacles or points of spontaneous interest forces the researchers to deviate from the line drawn - deviation is understood as a conscious act of serendipity, allowing for expanding knowledge when staying curious and open-minded to whatever specific situation is being encountered along the way (Diedrich et al. 2014). During travel the relational specifics of the site are recorded through means of film, photo, sampling, sketching and other artistic ways of capturing on-site qualities. While travelling, intangible qualities of landscape elements become prompts for recording and conversation - places of situated knowledge (Braae et al. 2013, p 198; Diedrich et al. 2014). The prompts relate to natural systems such as geology, topography and wind and are captured in, for example, photos revealing atmospheres of exposure and enclosure, of wet and fresh, and of dark and bright (Diedrich et al. 2014). The post-travel phase consists of sorting, evaluating, combining, synthesizing

and elaborating on a representation of the collected raw material that will add a deeper understanding of the site just visited. This also allows for a second reading of the material - where knowledge is being produced between the records (Diedrich et al. 2014).

Defining the site

U.S scholars Carol Burns and Andrea Kahn offer a definition of site where they recognise three scales: the area of control, the area of influence, and the area of effect. The area of control regards property lines. The area of influence is much larger, encompassing forces that act upon a plot without being confined to it. Lastly the area of effect corresponds to the domains impacted by a following design action. To be noted is also the acknowledging of the overlap between the three categories that occurs, despite their different geographies and temporalities (Burns, Kahn 2005, p xii). In this thesis the transect embraces the Salton Sea Watershed as the area of control, with the conscious decision not to travel into Mexico due to matters of convenience (visa, immigration), but to focus on the American part. The area of influence is larger and hard to set boundaries for, but the larger area of California and neighbouring states in the Colorado River Aqueduct is of importance. The area of effect could possibly range in scale from very local, to more widespread.

Forms of representation

Film and photo were used during fieldwork in order to capture and frame atmospheres and analyse constructions on-site. Girot and Wolf (2009) state that "it is not what a society looks at, rather what it ignores that really matters in the end, and becomes the expression of our times". By using different approaches to the act of photographing and filming an ex-

ploration of new forms of vision focusing on different aspects of experience. Examples are the fast movement through the landscape which reveal a contemporary blurred and reduced form of landscape, shifting to a slow movement offering choices of what to film – therefore being an analytical tool while performing (Girot 2009).
Another tool used was the technique of sampling in form of collecting material on site. In the Deviant Transect method the samples have been collected on site, and recorded off-site (Braae et al. 2013, p 196), whereas I have opted to photograph the physical samples on the actual site of sampling. This manner may sometimes cause less attention to be paid to the physicality of the sample itself, but nonetheless I felt a necessity to not remove the sample from its surrounding atmosphere but rather showcase it across the scales in its right element. The sampling has also carefully been mapped through the means of GPS recording. Using the georeferencing system of latitude and longitude can be seen as both a practical reason; as an orientation of where recordings were made, in (to me) an unknown place. The system also references the American take on land division through the National Land Survey, when land was measured and divided into a grid system using latitude and longitude. The native Hopi tribes also constructed their maps after astronomically measures (Cosgrove & Corner1996, pp 5-7).

During the traveling I encountered people kindly willing to share their water stories with me. Some of these encounters have been represented in this thesis in form of summations of a conversation taking place. These summations are not claiming to be transcripts of whole conversations, or to be representative of all conversations that have been taking place. Nor is it claimed they are carried out by strict protocols, but rather as unstructured interviews allowing for the conversation to twist and turn (Trochim 2006).

GPS/LOGGING & MAPS

Pre-downloaded maps in phone, GPS function activated

CAMERA/PHOTO & FILM

Camera for photographs & film, spare batteries and charger

RECORDER/INTERVIEWS & SOUND SAMPLES

Recorder for sampling sounds and interviews

ZIP-BAGS/PHYSICAL SAMPLES

Zip-bags for containing samples while photographed and transported, tape and good marker pens

TOOLS ON TRANSECT

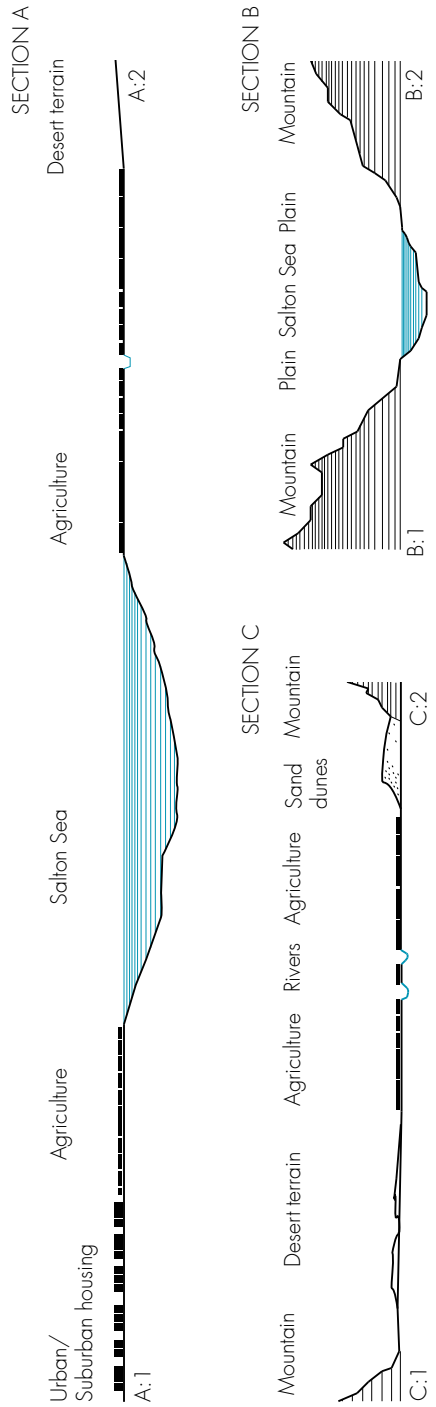
PRE-TRAVEL TRANSECT LINE
The 10 days travel itinerary
within the Salton Sea Watershed.
Initial points of interest are marked with stickers,
colour co-ordinated according to type of relevance;
industrial, cultural or directly water-related.

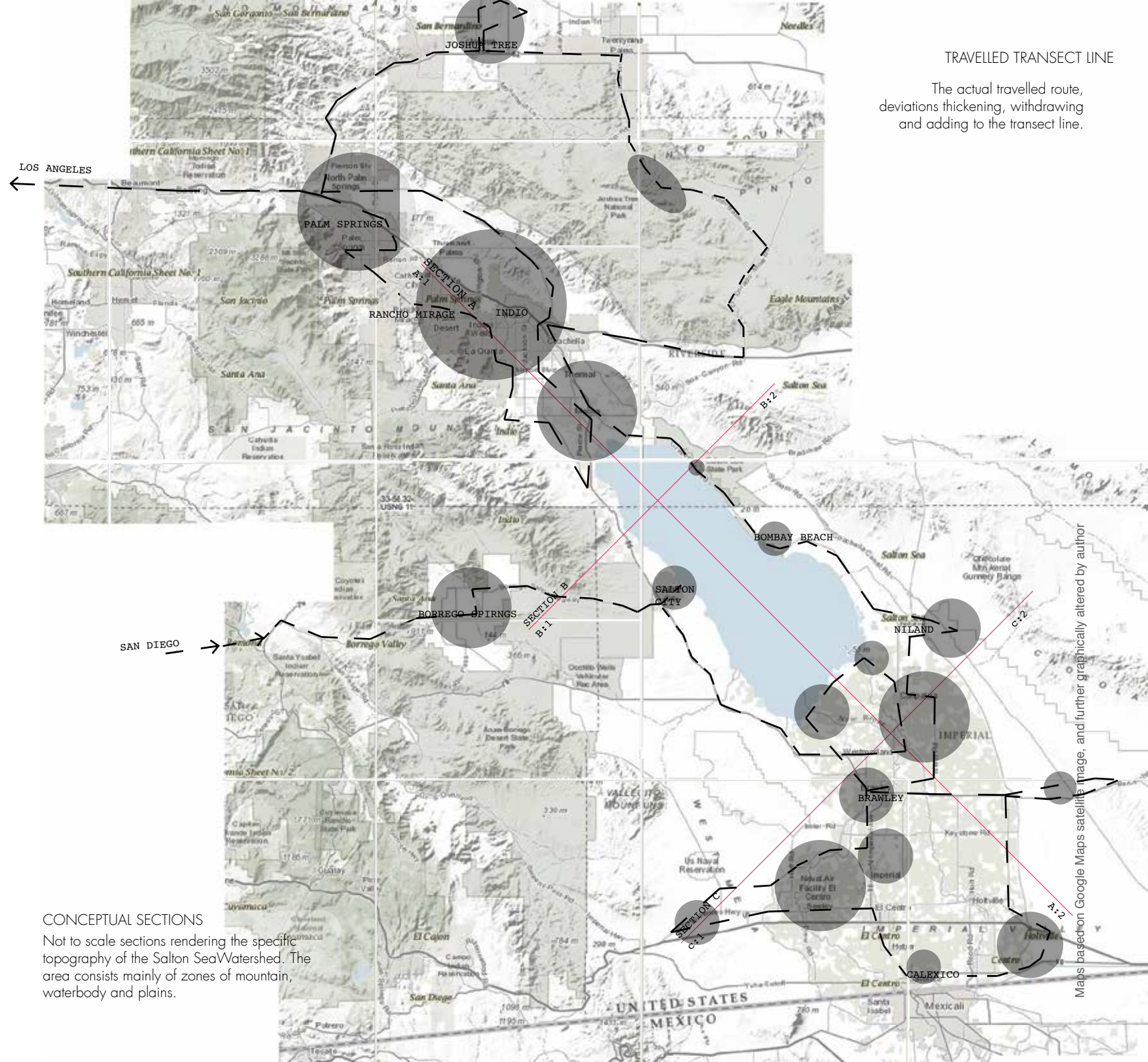
Setting out on a Deviant Transect

The initial travel scheme and the transect line for the 10 days fieldwork in the Salton Sea Watershed was informed by a number of factors and sources. Other than traditional sources such as maps, Google searches and books on the topic of the arid west, the Land Use Database - available through the work of the organization Center for Land Use Interpretations, (clui.org) and based in Los Angeles - was also of great interest. Studies in their library archive also aided the preparations. My pre-knowledge of potential sites of interest, such as the Salvation Mountain outside Niland, was expanded and further sites of both direct and in-direct water knowledge was added to the transect line.

Once on-site I found that the 'prompts' of the deviant transect method, evolved into being situations or places that provided me with what could be described as 'seeds of questions', posing questions about land use and the landscape construction.

On-site I accessed the transect line, which I had drawn as a loop around the Salton Sea, starting from and returning to the coast north of San Diego. My first impressions approaching the watershed was that of ascending through the rising mountains and the change of scenery and climate whilst driving inlands. During the travels a number of small deviations were made, most of them thickening the line. One major detour was also made when deciding upon traveling through the Joshua Tree National Park, Ito leave the watershed behind in order to explore the art-scene and community around the town of Joshua Tree, holding in promise that of another attitude towards life in arid lands.





TRAVELLED TRANSECT LINE

The actual travelled route, deviations thickening, withdrawing and adding to the transect line.

CONCEPTUAL SECTIONS

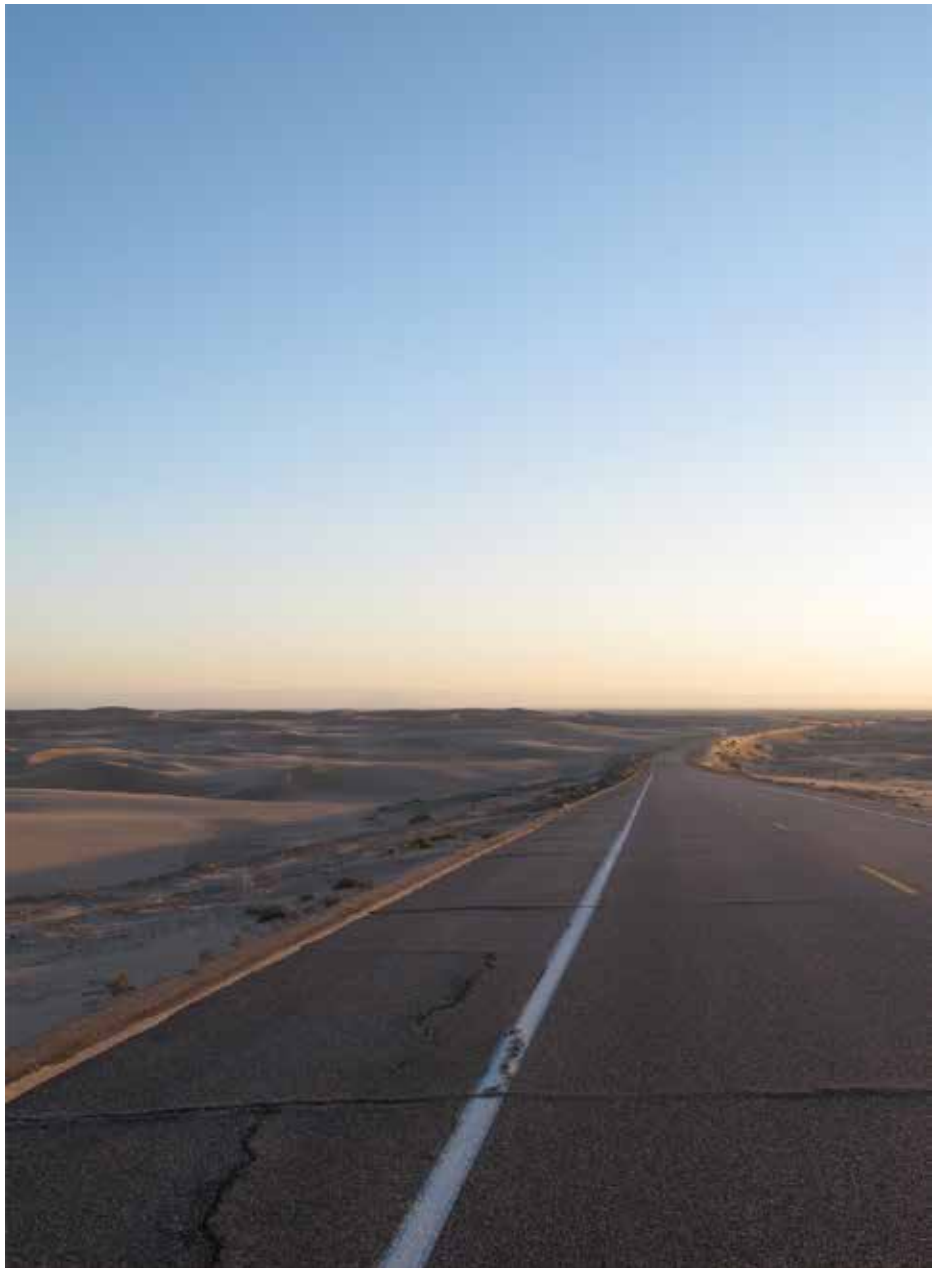
Not to scale sections rendering the specific topography of the Salton SeaWatershed. The area consists mainly of zones of mountain, waterbody and plains.

Structure

This thesis is arranged in four main chapters. The first chapter, Positioning the Salton Sea area, acknowledges the need to position the area of concern in order to help frame the work. This is done from a theoretical point of view, drawing on the writing on systemic change offered by a number of scholars on topics such as the age of the Anthropocene, bottom-up movements and site-specific landscape architecture theory. The second subchapter positions the Salton Sea area from a historical point of view, uncovering layers of geology and the history of human relations to the site.

Chapter 2: The Act of Land Colonization, conceptualizes three themes of land use that can be regarded as examples of land colonization and is heavily dependant on discoveries made during fieldwork. Here water constructions, agriculture and sub-urban aesthetics are explored. In Chapter 3: The Act of Challenging Business as Usual, three other themes concerning desert as an arid garden, local food production and the culture of mobile homes is studied. The fieldwork explores alternative land use practices in the area.

Chapter 2 and 3 focus on what attitudes are related to the water use producing the specific landscape in place, and what attitudes and sites are able to become driving forces towards a more sustainable use of water in the area. It forms the basis for Chapter 4: Invitation For Transformation. Here translations and conceptualization of driving forces identified in previous chapters are offered through the means of a sketchy design proposal. By testing how they could be conceived as scenarios at imagined test sites at concrete sites in the Salton Sea area they serve as visionary examples of a possible future.



Paved roads organize the arid lands.
The Algadone Dunes, Imperial Valley.

Chapter 1:

Positioning the Salton Sea Area

In order to inform and create an understanding of the challenges facing the Salton Sea area, this chapter aims at creating a theoretical and contextual framework. To guide the coming work when exploring the Salton Sea area I acknowledge the need to position the area; both in a theoretical way - in order to understand larger systemic forces affecting the area; and the need to read through the historical layers that has formed the area over time.

In the subchapter Theories - understanding systemic change, Dirk Sijmons theories about the new geological era of the Anthropocene put the environmental changes happening in the Salton Sea area in a global context. Trying to explain what forces are at work, causing these severe biospheric changes Saskia Sassens theories about Dead Land, Dead Water and Predatory Formations are explored. On an organizational level Grace Lee Boggs writing in *The Next American Revolution: Sustainable Activism for the Twenty-First Century* contributes to this body of work when it makes connections between societal change and bottom-up initiatives as a transformation strategy. Adding to the concept of transformation and place-based change, from a multidisciplinary, academic point of view, is the thinking about site and site specificity, presented in From the Ground Up. Here theories from scholars Andrea Kahn and Carol J. Burns, as well as Elizabeth Meyer, Robert A. Beauregard and Lisa Diedrich, Gini Lee and Ellen Braae guide the perception of site.

Another type of effort to understand and explain attitudes and patterns of land use and exploitation of resources in the Salton Sea area is made in the subchapter Histories - understanding historical contexts. Here I turn to the history of the American West in order to learn about colonization and the philosophical and economic driving forces behind it. Exploring the context of the American West adds to the bigger picture, when continuing to examine the local historical conditions of the Salton Sea area, itself carrying its own history of geological formation, land use patterns and human relationship to the landscape.

The Age of the Anthropocene

Environmental changes are affecting the Salton Sea area; water supply is diminishing, sand storms are occurring more often and the climate is becoming more and more instable. This is however not only a local phenomenon, but also an expression of changes on a global scale. In order to understand these environmental changes as something related to human activity, and furthermore how this can inform our thinking and action, it is interesting to examine the concept of the Anthropocene.

A few years ago the Nobel Prize winner Paul Crutzen introduced the "Anthropocene" as a term of a new geological era, the era of the human being. This means that humans are now affecting the earth to that extent that it can be categorized as a new period of time.

In the introduction to the catalogue accompanying the International Architecture Biennale Rotterdam (2014) the landscape architect and curator Dirk Sijmons refers to the Anthropocene and states that there is no going back and that the Anthropocene postulates that human and natural processes are linked together in a new whole (2014, p4). Further he elaborates that many processes around us are hybrids: combinations in which both "natural" and "human" forces are at work (2014, p 5). Land use, river and ocean currents, flora and fauna, the climate, and the urban landscape are intertwined, making it impossible to separate "natural" and "artificial".

The Anthropocene as a concept is, according to Sijmons, a new hypothetical word where we are able to organize a number of messy phenomenas and make it understandable. There is also a serious moral subtext in the shift to the Anthropocene; that we humans are responsible for the consequences of our interventions. But the notion of the Anthropocene should not make us nostalgic. Instead we should rise to the challenge and courageously move forward:

"There is no 'initial situation' or 'natural equilibrium' to fall back on, just as we cannot go back to last week's weather. We are living in the Anthropocene, whether we like it or not. We can only go forward, and we have to find the best ways of making progress"

Sijmons 2014, p 4

Dead Land, Dead Water & Predatory Formations

Also sociologist and researcher Saskia Sassen sees accelerated histories and geographies of destruction on a scale never before experienced on our planet, all pointing to the notion of the Anthropocene. In her work she set out to explain how this can be, uncovering dynamics and evidence of a systemic shift. The investigation of assemblages creating environmental devastation and injustice is interesting for this thesis, aiding the understanding of landscape constructions; both the ones working towards continuing unsustainability, and the ones having the potential to prevent ecological and human crisis in the Salton Sea area.

In her work Sassen studies a number of, at first, seemingly disconnected cases touching diverse matters such as land grabs and the financial crisis in southern Europe. Further she studies forms of biospheric expulsions concerning our environment: land, water and the global scale-up of environmental destruction (2014, p 151). Globally, segments of the biosphere are being expelled and become dead land and dead water (2014, p 210).

There is a massive claim for land and water, where growing poverty, eviction of flora and fauna are consequences of land being repositioned as sites for extraction (2014, p 150). Sassen researches cases of dead land: mining operations causing toxification of land beyond rescue, industrial waste and nuclear accidents expelling land for all foreseeable future. When examining dead water she accounts for dead ocean zones and dead inland water bodies caused by hypoxia due to fertilizer run-off in rivers, rising sea levels and trash gyres contaminating the oceans. Further, she investigates cases of water grabs by soda companies and water bottlers over pumping water, effectively draining aquifers.
Sassen makes a point when examining the worst cases, but even though most of the earths land and water are not in fact dead, much of it is fragile. In the U.S. more than a third of the land is stressed, scientifically measured. This also includes the Midwest (2014, p 150). The agricultural land destruction is posing threats to the notion of living land: erosion, desertification, pesticides making land toxic, and land overuse through monocultures (2014, p 152). Another severe implication is land affected by drought, which has increased over the last fifty years. The 2012 drought in the U.S. was estimated to affect 80 % of the agricultural land, the worst drought since the 1950 and research suggest that by 2020 the American Southwest will face permanent drought (2014, pp 152, 203).

So how could all this happen?
As an answer Sassen introduces the concept of predatory formations, explained as assemblages of powerful actors, markets, technologies, and governments. Together they shape powerful new dynamics that cannot be reduced to any of the source institutions - not the economy, not the law, not capital (2014, p 221). Consequently the predatory formation gets too complex for any one individual or even firm to control. Sassen further connects the predatory formation with a systemic logic at work within them. The consequences of predatory formations can be far-reaching. They work on so many levels and are complex. And the more complex a system is, the harder it is to understand, the harder it is to pinpoint accountability and the harder it is for anyone in the system to feel accountable (2014, p 215). The most extreme outcome of predatory formations at work is expulsion - from economic, social

and biospheric systems. The expulsions are happening at concrete sites, at what Sassen describes as the systemic edge (2014, p 211). Simply put; land, water and people that happen to be at the systemic edge get pushed out. Land and water dies, people become marginalized.

This systemic shift Sassen connects to the change from Keynesianism in the 1980s, to the global era of privatizations, deregulation, and open borders for some. She argues that we have a dangerously narrow conception of economic growth, in the shift from the project of building the welfare state into a system where our institutions and assumptions are increasingly geared to serve corporate economic growth (2014, p 213).

Sassen acknowledges the predatory formations, and its consequences, as something that tells us about the larger challenge we confront - going beyond powerful individuals and institutions (2014, p 78).

In the Salton Sea area land salinisation, toxification, sand storms, drought, overuse of land through monocultures, pumps draining the aquifers, species extinction, the slow death of the Salton Sea and its discharging rivers - all can be seen as examples of land and water dying. All are severe problems that seems connected in a hopeless mess, having far-reaching consequences for people and animals, locally as well as on a larger scale. The analytical tools offered by Sassen therefore helps conceptualize the challenges not only confronting the area she exemplifies in her writing, but those also facing the Salton Sea area, where the same type of dynamic assemblages and systemic forces seems to be at work.

We Are the Leaders We Have Been Looking For

As with Saskia Sassen, Grace Lee Boggs senses our current time changing dramatically. Boggs is acknowledging the same types of challenges as Sassen, and her work concerning societal change and bottom-up initiatives as a strategy to address our current challenges could serve as inspiration in the Salton Sea area.

Grace Lee Boggs is an activist and philosopher, and in her hometown of Detroit she is seeing a new movement emerge. The Iraq war, outsourcing of jobs, a failing educational system, the large increase in prison complexes, and the planetary crisis in the form of climate change, is demanding a transition from just complaining and protesting - towards a search for another way of living (Moyers 2007). The physical threat posed by climate change is not only a material crisis but profoundly spiritual at its core, challenging us to think about the future of the human race and what is means to be a human being (Boggs 2011, p 32). "The question is what is going to motivate us to start caring for our biosphere instead of using our mastery of technology to increase the volume and speed at which we are making our planet uninhabitable for other species and eventually for ourselves?" (Boggs 2011, pp 30-31).

Grace Lee Boggs recognizes our current time as a period where the issues are so basic, but yet so demanding of everyone and she acknowledges the importance of the need to stop thinking about ourselves as being victims and instead focus on becoming the solution, as we all are part of the problem (Boggs 2011, p 29). Boggs' vision is that of a new American Revolution, meaning that it is time to start anew, with a more active, global, and participa-

tory concept of citizenship – becoming the change we want to see in the world. She acknowledges a vision of an American Revolution as a Transformation, as projected by Martin Luther King when calling for "redemption of the soul of America" (Boggs 2011, pp 72-73).

This evolution of the humankind is today happening on a number of places, according to Boggs, where people work together to solve very practical problems of daily life. Boggs claims that "…we are beginning to see that the world is always being made and never finished, that activism can be the journey rather than the arrival, that struggle does not always have to be confrontational but can take the form of reaching out to find common ground…" (2011, p 48) and she refers to it as the kind of transformational organizing we need in this period, where the creation of new forms of community-based institutions will give us ownership and control over the way we make our living and ensuring that community-building and environmental concern is at heart.

For this new, diverse movement Boggs does not recognise any leaders, but rather suggests that we rethink the concept of "leader" as something implying a "follower". We should instead appropriate and embrace that we are the leaders we have been looking for (Moyers, 2007). The movement today is not created by one common ideology, but by individuals and groups responding creatively and with passion to the problems faced in their local sphere (Boggs 2011, p 178).
Grace Lee Boggs: "We have a long road ahead, because the rising grassroots movements provide the opportunity to create a new system of democracy, work, education,

and environmental stewardship based on completely new values. That means we have to think seriously about values and not just about abuses. We need to understand that we are at one of those turning points in history where we need revolution – and revolution means reinventing culture (2012, p xvii).

From the Ground Up

The view upon transformation and place-based change is at the core in academic thinking concerning site and site specificity. Learning about the locally oriented bottom-up change suggested by Grace Lee Boggs, makes it meaningful to further understand place and site from a landscape architectural point of view in order to approach the Salton Sea area.

Closely connected to the issue of defining site, here as a three-part definition offered by scholars Andrea Kahn and Carol J. Burns, is the multidisciplinary thinking about site, which has gained increased interest over the past years. U.S landscape architecture researcher Elizabeth Meyer perceives landscape architectural design and theory as situational and finding its meaning in the site as given: "Like Feminist criticism, landscape architectural design and theory are based on observation, or that which is known through experience, or the immediate and sensory - that which is known by all senses, not only visual. Thus landscape architectural theory is situational - it is explicitly historical, contingent, pragmatic and ad hoc. It is not about idealist absolute universals. It finds meaning, form and structure in the site as given" (Meyer in Swaffield 2002, p 2).

Kahn and Burns claim that conceiving a site is itself an act, a conscious design action that demands consideration. Often these definitions are referred to as pre-design issues, when it in fact is a part of shaping the coming project. Also important to point out is that "a site is defined by those holding the power to do so" (Burns, Kahn 2005, p x). Burns and Kahn further argue that design does not simply impose on a place, but is a consequence of dialogic interaction between designer and site, therefore making site a relational construction that acquires meaning and value through situational interaction and exchange (Burns, Kahn 2005, p xv).

In the same sense it matters how we choose to depict or represent a site. Kahn stresses the relationship between site representation and the formation of thoughts, or knowledge generation. Site representation therefore becomes less a matter of showing a reality, but as of means to construct knowledge in order to cope with the multitudes of realities that exist. Instead drawings, models and discourses represent a thought about what the site might be - making site concept manifest by design (Kahn 2005, p 289).

Kahn also introduces the term of site as mobile ground, conceiving site as subject to change that goes far beyond the control of a designer (Kahn 2005, p 290). Also recognizing site as non-static is the redefinition of design methods as transformative approaches, suggested by Braae, Diedrich and Lee. "Transformation is a situation when something is changed from one state to another - from "something" to the new, or at least altered, "something else" - a condition that recognizes that neither before, nor after, is static" (Braae et al. 2013, p 193).

This respect for what's already there, connect to the statement "places are never empty" of Robert A. Beauregard, further embarking on a discussion on how regard or disregard of existing narratives shape design outcomes. Drawing on the example of settlers establishing

themselves in what is conceived as wilderness, creating narratives of discovery, conquest, and the beneficence of civilization - are narratives that could only be possible if the first understanding of the place is as alienated and empty. In contrast to this stands places that are being saturated with meaning, and therefore resist being turned into "cleared" sites. Instead, in these places a multitude of stories compete for attention, and do so with conflicting interpretations and story lines (Beauregard 2005, p 39).

In Conversation

The concept of the Anthropocene clearly allows us to address issues of severe environmental changes in new ways. Saskia Sassen brings attention to the systemic forces at work when examining changes in our economic system, and the consequences it has on climate change and expulsion of people and biospheres. Her conceptualization of dead land, dead water and predatory formations helps us envision the magnitude of devastation that can be done if the forces is not redirected. Sassen further points out that the spaces of the expelled cry out for conceptual recognition, and that these places also potentially are the new spaces for making - of local economies, new histories, and new modes of membership (2014, p 222).

Lee Boggs wants us to envision ourselves as solutionaries, revolutionaries, evolutionaries (2012, p xvi) - suggesting that we are the leaders that we have been looking for. Sassen and Lee Boggs both recognize our current time as a turning point in history. Lee Boggs: "with the end of empire, we are coming to an end of the epoch of rights. We have entered the epoch of responsibilities, which requires new, more socially-minded human beings and new, more participatory and place-based concepts of citizenship and democracy" (2012, p xviii). She continues: "Every crisis, actual or impending needs to be viewed as an opportunity to bring about profound changes in our society. Going beyond protest organizing, visionary organizing begins by creating images and stories of the future that help us imagine and create alternatives to the existing system" (2012, p xxi). The revolution Grace Lee Boggs is advocating comes from every each one of us, and she suggests starting from the ground up: "do something local, do

something real, however small, and don't disrespect the political things but understand their limits" (Moyer 2007), just as the work she is involved in, in Detroit, rebuilding, redefining and respiriting the city (Boggs 2011, p 74).

The concept of transformation as a method of design intervention, and the view that the site is situational, as discussed in From the Ground Up also connects to this kind of acknowledging of what is already there. The geographer Doreen Massey argues that "Local uniqueness matters…spatial differentiations, geographical variety, is not just an outcome, it is integral to the reproduction of society and its dominant social relations. The challenge is to hold two sides together; to understand the general underlying causes while at the same time recognizing and appreciating the importance of the specific and unique" (Massey quoted in Burns, Kahn 2005, p xxii). By changing our view upon "invention" as being something new, a condition of novelty - into the old definition of the word as to come upon, or a discovery in which new relationships are found for existing things and ideas (Dripps 2005, p 77) a site specific view could potentially enhance both spatial and social understanding of places. In that sense the transformations needed in the Salton Sea area could be conceived without repeating old patterns of colonization in the Arid West.

The conquest of both the American West and the Salton Sea area will be examined closer in the coming subchapter. Here the aim is to create understanding of the historical layers of geological formations, human relation to the arid landscape and what ideas made it possible to colonize the West in the way it was made.

..to continue to relate to the land either as an exploitable resource or as merely a scenic phenomenon is to fail to recognize the dynamic and interactive connectedness between human life and the natural environment.

JAMES CORNER (1996, P XIX)

Colonial Heritage: the American West

The American West is marked by colonization; of land, people and resources. In order to understand the area of today, ideas, politics and history of the West will be briefly examined.

The history of the American West is one of conquest repeating itself. The native populations of Indian tribes had adapted to life in the arid landscape, making use of water where available. When Spanish conquers came to the American West during 18th century they failed to understand Indian society and instead judged them as savages. With the Spanish came diseases and the Indian tribes were dispossessioned and made dependent on the Spanish when, land, water and crops were taken away from them (deBuys 1999, p 30).

In 1849, and for twenty years to come, there was a sudden rush to the West - hopes of finding gold made men risk their life crossing the great deserts. For those who made it, it could be rewarding, but for many it ended in tragedy and death (Worster 1985, p 71).

Pioneer settlers who were leaving the eastern territory or escaping famine in Europe in search for a prosperous future on the prairie grasslands of the West shortly followed the gold diggers. This coincided with Jefferson's making of a liberal democracy and the firm belief that this would be achieved by offering "liberty, a farmyard wide" (Cosgrove 1996, p 8). Jefferson recognized the "open" American space to the West, a vast blank canvas, as an opportunity to achieve the ancient European dream of utopia. By purchasing, exploring, mapping, and measuring land Jefferson laid the ground for the grid system, enabling colonization through individual property division (Cosgrove 1996, p 8). The colonization was further aided by the establishing of railroads, connecting the east coast with the west coast.

If first phase of the conquest of the West was the establishment of the Jeffersonian grid, then the second phase was the survey and mapping of soil and aquifers. The control of water in the arid West was a part of the Modernist visionary engineering, taming the wild rivers through concrete and water regulations. The dams and power barrages that now completely control the Columbia, the Colorado and the Snake River systems reached its apotheosis in the mid 20th century (Cosgrove 1996, p 10). It was seen as a way to enhance the western nature and to maximize the potential of the area through means of irrigations and electricity. By so doing a garden of the Northwest would be created (Cosgrove 1996, p 11). California in specific promised to fulfil dreams of Arcadian landscape. This dream remains visible in the landscape today; the Mediterranean echoes through the vineyards in Napa Valley and the suburban housing (Cosgrove 1996, pp12-13).

Post-WW2 the American West positioned itself as the undisputed agricultural leader, but was also contributing to the economy with industry, steel mills and coal and uranium mines. Influential politicians such as Nixon came from the area and the political rhetoric was that America's

good was the good of the American West. If the West was the empire, it was created through undisputed control of nature. The domination of water was the equal of surviving as empire (Worster 1985, pp 260-261, 265).

THE SOUTHERN PACIFIC RAILROAD
The West was colonized with the aid of railways, cutting through America, connecting the east coast with the west coast.

A Brief History of the Salton Sea Area

The colonial patterns of the American West also illuminate the history of the Salton Sea area. I will here examine local foundations such as geological formation creating the very special conditions of the area, and dive in to more specific history of land use and water engineering, which shapes the valley and its history of settlement.

The Salton Through is among the top ten lowest laying lands below sea level in the world. Depressions are associated with the moving of tectonic plates (Lynch 2006) and in the area the San Andreas Fault has shaped the Salton Through (deBeuys & Myer 1999, p 2). It is common that below-sea-level depressions contain salt lakes. Being a depression means being the lowest point, and from here water has no escape but evaporation, leaving salty traces behind (Lynch 2006). Salt is brought to the Salton Sea through rivers which terminate in it. In ancient times there was a lake named Lake Cahuilla covering the floor of the Salton Through. This lake has probably been coming and going over time and is known by the geological trails of a waterline, remains of freshwater shells and through the legends told by the local tribe of Cahuilla Indians (deBeuys & Myer 1999, p 58).

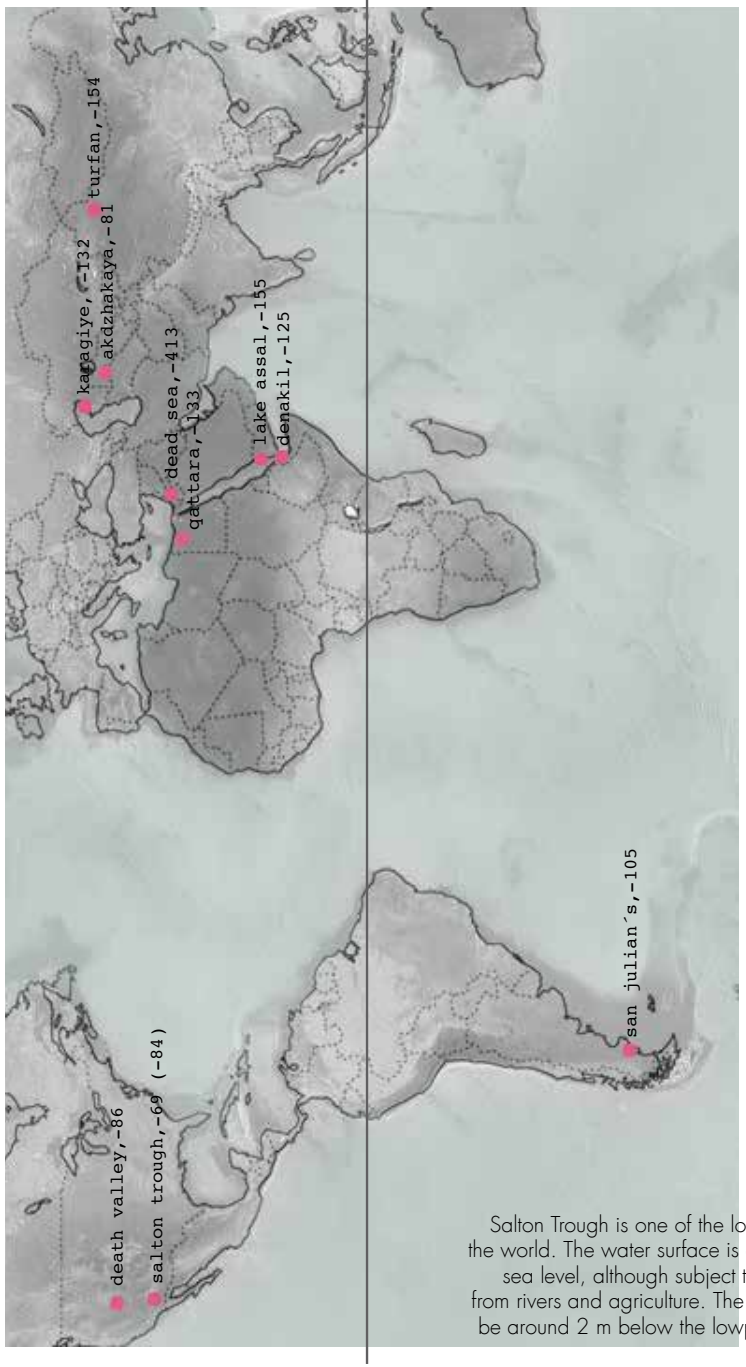
Just like other parts of the American West the Salton Sea Area was inhabited by various Indian tribes, later invaded by the Spanish, followed by Mexicans and gringos in search for gold, and finally colonized by numerous pioneers searching for agricultural land. In the trails of the railroad built through the area in 1877, the New Liverpool Salt Company was soon formed, operating a salt

mine in the bottom of the basin. The salt came from saline hot springs in the area. When the water evaporated it left 95 % pure salt behind. In that sense it was more of a practice of salt harvest than regular mining, as the salt kept renewing itself (deBeuys & Myer 1999, pp 64-65). In 1893 the first survey for reclamation was carried out. The idea of reclamation was closely connected to an evangelical view of the deserts as fallen lands, requiring redemption (deBeuys & Myer 1999, p 5). In 1901 the first irrigation canal delivering water from the Colorado River into the basin, now renamed the Imperial Valley, was opened. This was the first step towards an agricultural empire. It was a complicated move to bring water into the valley, and because of land and water speculation together with engineering mistakes coinciding with unusual high peaks of the Colorado River, the water breached a dike in 1905 and flooded. The massive flood caused great harm, and was not stopped until two years later, in 1907. By then the water filled a large part of the valley basin, now too great to be called a lake, and the Salton Sea was formed (deBeuys & Myer 1999, pp 8,101).

In the 1930s old dreams of small-scale farming were replaced with ones of a large-scale mastering of nature and total control of resources. Great dams were built along the Colorado River, serving economical growth. In 1941 the All-American Canal was finished, draining the Colorado River for water, leaving almost nothing left for the farmers in Mexico, or its delta (deBeuys & Myer 1999, pp 162-163). This security of water was good news for the agriculture in the Imperial Valley, growing everything from vegetables to cotton. The 1950s came with a peak in real estate value and Salton Sea was the playground for

the cities of the coast (deBeuys & Myer 1999, p 9).
Palm Springs was the center and here the rich and famous bought holiday homes. The sea was boosting motorboat races, fishing and lazy days at its shore. The sea was also recognized as a crucial stopover for migratory birds on the Pacific flyway and in the 1930s a national refuge was established at the south end of the sea. Although remaining an important stop the Salton Sea today also poses a threat to wildlife, demonstrated through reoccurring die-offs among birds. The exact causes are not known, but perhaps it is the accumulating salinity and levels of toxics that are to blame.

TOP 10 DEPRESSIONS WITH THE LOWEST DRY LAND IN THE WORLD:



Maps based on Lynch (2006) and further graphically altered by author

LOW-LYING LAND
Salton Trough is one of the lowest laying places in the world. The water surface is approx. 69 m below sea level, although subject to flux of yearly runoff from rivers and agriculture. The lake bottom is est. to be around 2 m below the lowpoint of Death Valley.

In Conversation

Geological formations have over time created the very specific desert landscape in the Salton Sea area. The harsh, arid conditions demanded great knowledge and adaptation skills by the first settlers in order to sustain life in the extreme climate. Later colonization does not, unfortunately, show the same type of adaptation. Rather the road to success has been paved through the means of technical achievements. Not only clever engineering has enabled the Salton Sea area to become one of the greatest farming areas of California; history teaches us that the ideas behind colonization are of uttermost importance. The view of the desert as wasted land, ruined and in need of resurrection is at the core of the American colonization. Quite possibly these thoughts could still play a role in the area today; justifying further human achievements and mastering of the landscape.

Mastering of the Salton Sea area has, as we have learned, not been an easy task. The area is proof of Doreen Masseys statement previously discussed, about how local uniqueness matters. The geology forming the Salton Trough and the rich history of the poor working class farmers risking everything for the belief in a prosperous future both establish local setting and general tendencies; forming the national spirit of the American Dream.

Using the knowledge gained in this chapter enables deeper understanding of the systemic patterns in the area. The next chapters of this thesis set out to examine the Salton Sea area of today from two very different aspects; in Chapter 2: The Act of Land Colonization aspects of water constructions reflecting attitudes of colonization is examined, where as Chapter 3: The Act of Challenging Business as Usual, shows different attitudes regarding the interaction between humans and the landscape.

Finally in Chapter 4: Invitation for Transformation conceptualizes findings and understandings gained during fieldwork, regarding for example aesthetic expressions, agriculture and types of dwelling. It examplifies how possible strategies for site specific findings in the Salton Sea area can become a key for future adaptation and water constructions in the Salton Sea area.

Chapter 2:

The Act of Land Colonization

Chapter 2 aims at mapping attitudes and land use in the Salton Sea area that can be regarded as signs of land colonization. As an example of such practices 3 themes will be explored; Water systems at work, Farming the land and the concept of Lush living.

The intention with the coming subchapters is to trace the water in the landscape, in order to understand and uncover situations, sites, atmospheres, and attitudes. Together this is forming constructed water landscapes in the area.

1. Water Systems at Work
The subchapter Water Systems at work examines how the water flows through delivery systems, rivers, local aquifers, natural run-offs, and the Salton Sea. Water systems at work tries to make it possible to understand what resources are currently being used - both regionally and locally. The physical traces of water use are important as they reveal not only their physicality but also attitudes towards water use. The issue of water rights as an economic factor that shapes the use of water will also be briefly examined.

2. Farming the Land
The agricultural sector is large in the Salton Sea area and uses a big percentage of available water. This makes it interesting to take a closer look, in order to learn something about water landscapes. In Farming the land, mapping aims at showing the location and scale of local as well as regional agriculture areas. A short overview on export, type of crops, and the labour involved is revealing local practices and conditions for the conventional farming. Of interest is also the number of different irrigation techniques used in the area.

3. Lush Living
The urbanization rate in the Salton Sea area is increasing rapidly, and so is the luxury tourism industry. As both the urbanization and tourism goes up, so does the demand for water. Therefore it is interesting to examine the urbanization patterns on a regional and a local scale. Further the prevailing outdoor urban aesthetics, demonstrated in the design of streetscapes, public space, private parcels, gated communities, and in tourist resorts, is explored. The implications of these design choices, such as maintenance and irrigation is briefly reviewed.

water systems at work
_in search of water constructions

I began my journey with the mission to trace the water - or the absence of it - in the arid lands of southern California. With an open mind and a rough outline of the Salton Sea watershed I set out for my quest. Whilst making my way across, along and around the defined path of travels I came to physical encounters showing attitudes towards water use; concrete aqueducts, a number of rivers and its beds, water storing facilities, flood protecting infrastructure and abandoned seaside resorts. I was amazed by the domestication of water and searched for explanations and deepened knowledge amongst people I happened to meet along the way, kindly sharing their water stories with me.

The experience of water and its presence in the landscape was also informed by more subtle characters such as the scale of the landscape; the vastness and the open space. The sun was shining relentless in the desert summer, reflecting in the surface of water or trembling over paved roads as I experienced it all in different paces; through the car window and in stillness.

Water, even though scarce, is not hard to encounter in the area. But to get in full contact is another matter. Often I found myself standing next to it, but still unable to reach. The water, visible and audible, but still untouchable lingers in my memory.

Water flowing through arid land.
The contrast of the dry soil against the wild, but seemingly domesticated water is mighty and daunting at the same time. In the hot desert sun the appereance of water is both common and a revelation.

On California scale:

Large parts of California depend on engineered water delivery systems for water support. It is an intricate system of aqueducts, surface reservoirs, groundwater reservoirs and natural rivers. Sacramento River is an important water resource discharging into the San Francisco Bay area. San Joaquin River is another major river. San Diego, Los Angeles and San Francisco are all large urban areas in need of water deliveries.

Maps based on http:\watershed.ucdavis.edu\ , and further graphically altered by author

A landscape shaped by water rights:

The water legislation of California is complicated and offers no great protection of the groundwater (Sassen 2014, p193). Sawyer states: "groundwater is frequently pumped by one landowner and sold or given to another, and groundwater has often been exported from one overdrafted basin to another (especially during the recent drought). Probably more than any other body of natural resource law, groundwater law is often honored more in the breach than in the compliance" (Sawyer, p 9).

When it comes to groundwater there is no comprehensive, statewide regulatory scheme governing the extraction or use. California is one of the few states in the West without a comprehensive statutory framework for groundwater regulation. The strongest right to groundwater has the party with Overlying Rights - meaning if your land is placed over an aquifer you have the right to draw a reasonable amount a water from it and use it on the overlying land (Sawyer, p4-5). This is what is happening when private landowners drill their own wells on their properties and for example irrigates their golf courses. Water rights and the extracting free water is key to sustaining the profitable luxury tourism business.

Water is traded for economical purposes between different water rights holders and basins. To sell water simply means taking out a lesser share from passing aqueducts, and to buy means to withdraw more. The share of water is usually determined by water rights - often historically determined in practices of "first there, first served". This explains why farmers with fields full of crops in severe drought can only look at the water passing just right by in canals, without possibilities to use it. It also explains why some counties, as the Imperial Valley, are in possession of very strong water rights and large allocations. The water rights determine where agriculture can still take place in times of severe drought.

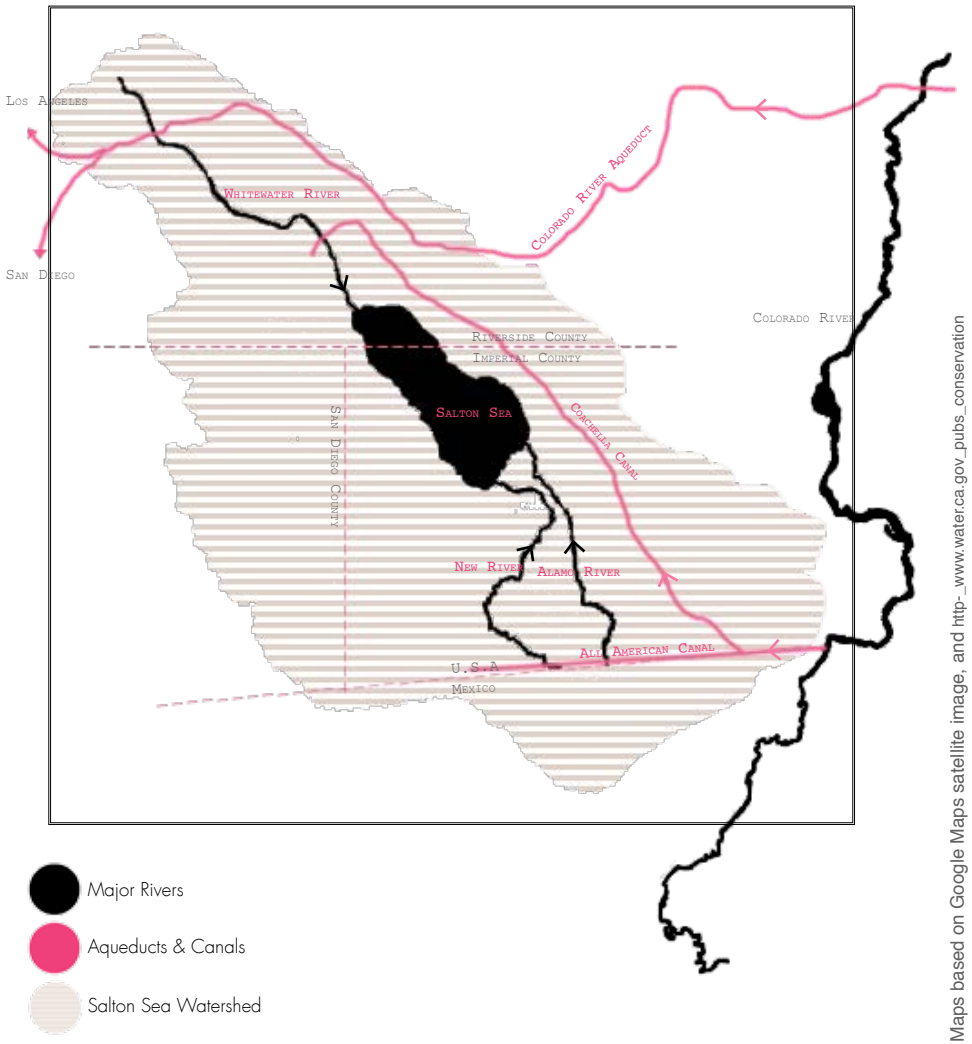
"Due to the drought water will only be given when asked upon"
Restaurant sign in Los Angeles, august 2014

2

No Trespassing
Property of Imperial Irrigation District
The water is subject to ownership; private or federal. The property claim is demonstrated wherever one encounter water in the landscape.

On local scale:

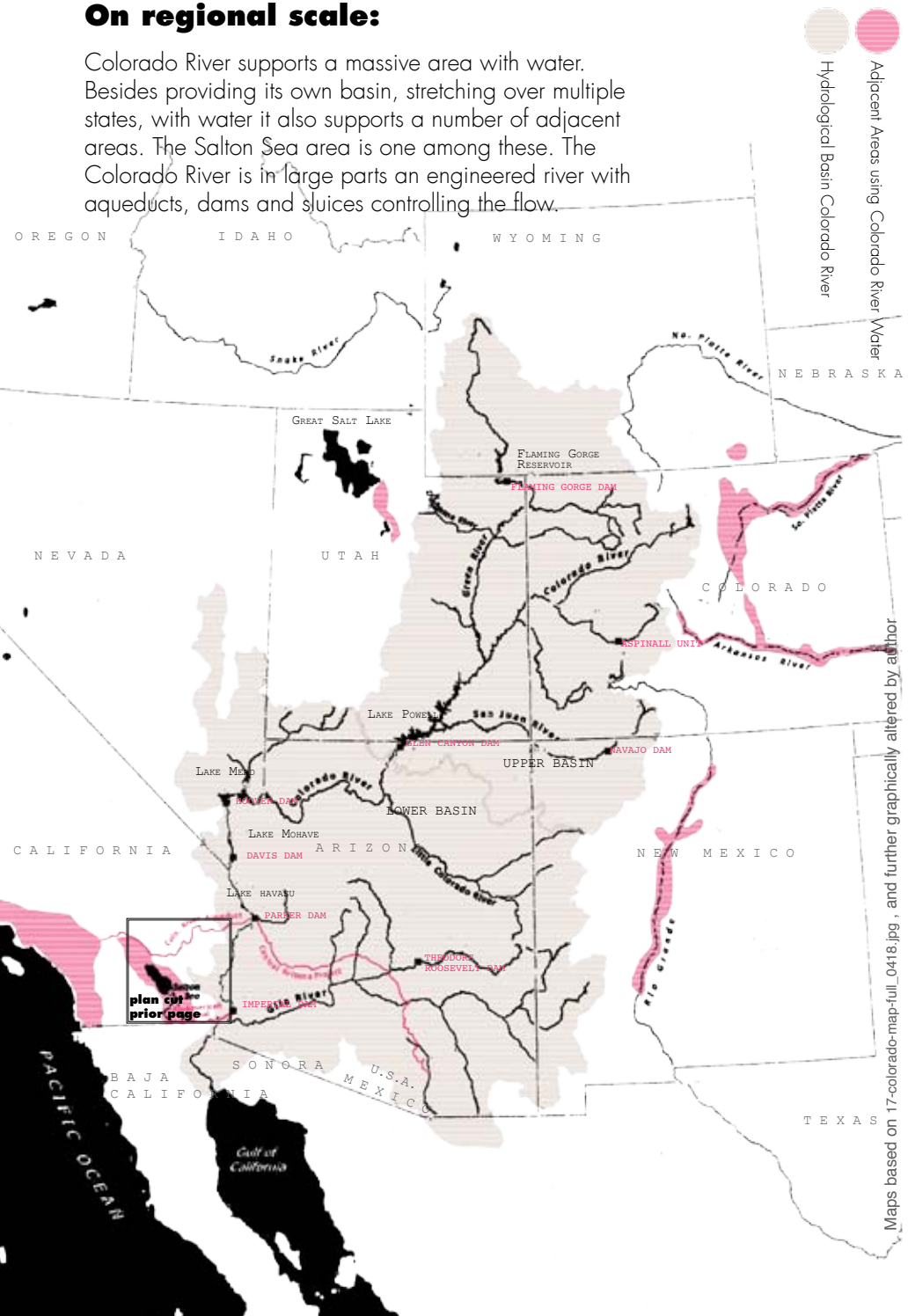
Colorado River supports large parts of southern California with water. Almost all water used in the Salton Sea watershed originates from the Colorado River and the dry desert basin completely depends on the import. Water is imported through the main aqueducts All American Canal and Coachella Canal (U.S Depertment of Interior A 2008, p 1). Three larger rivers discharge in the Salton Sea: the New, the Alamo and the Whitewater River. The Alamo and the New River originates in Mexico.



Maps based on Google Maps satellite image, and http-_www.water.ca.gov_pubs_conservation _salton_sea_watershed_map_watershed.jpg and further graphically altered by author

On regional scale:

Colorado River supports a massive area with water. Besides providing its own basin, stretching over multiple states, with water it also supports a number of adjacent areas. The Salton Sea area is one among these. The Colorado River is in large parts an engineered river with aqueducts, dams and sluices controlling the flow.



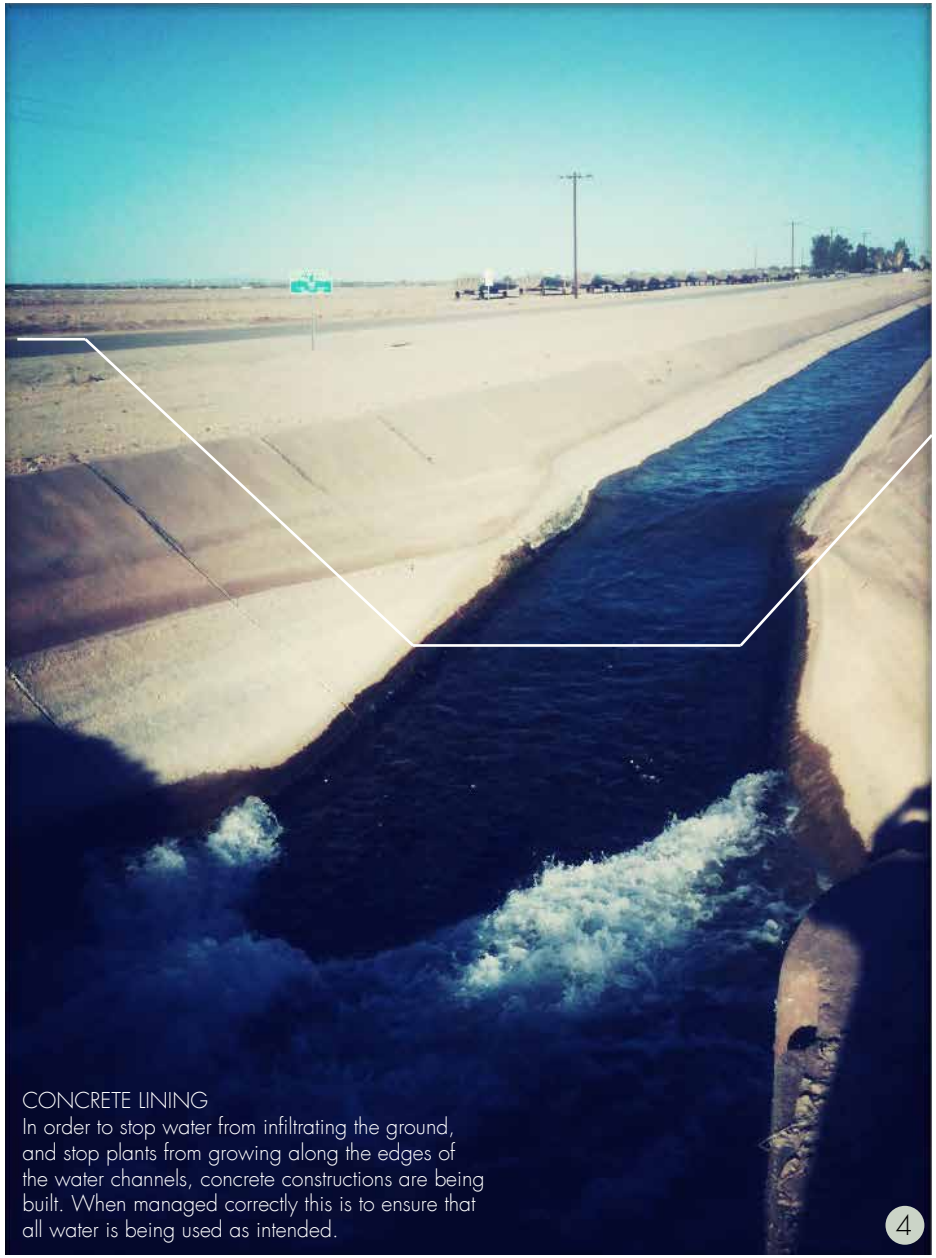
Maps based on 17-colorado-map-full_0418.jpg , and further graphically altered by author

On site: aqueducts

Engineered system of aqueducts, sluices and retention dams allowing for the import and distribution of Colorado River water. The water infrastructure is clearly visible in the landscape and ranges from large scale pumping stations for aqueducts such as the All American Canal, down to smaller pumps and sluices regulating the water allocated for individual irrigation systems.

3

LARGE SLUICE & PUMP STATION
Larger sluices are found along the aqueducts in order to control the water flow. From here levels and export of water to areas further down can be controlled.



CONCRETE LINING
In order to stop water from infiltrating the ground, and stop plants from growing along the edges of the water channels, concrete constructions are being built. When managed correctly this is to ensure that all water is being used as intended.

4

DISTRIBUTION SLUICE

With sluices it is easy to control the amount of water allowed in channels allocated for irrigation. When water is being bought the sluice gate can be opened and water allowed to flow. In this way the amount of water let through the gate is being measured.

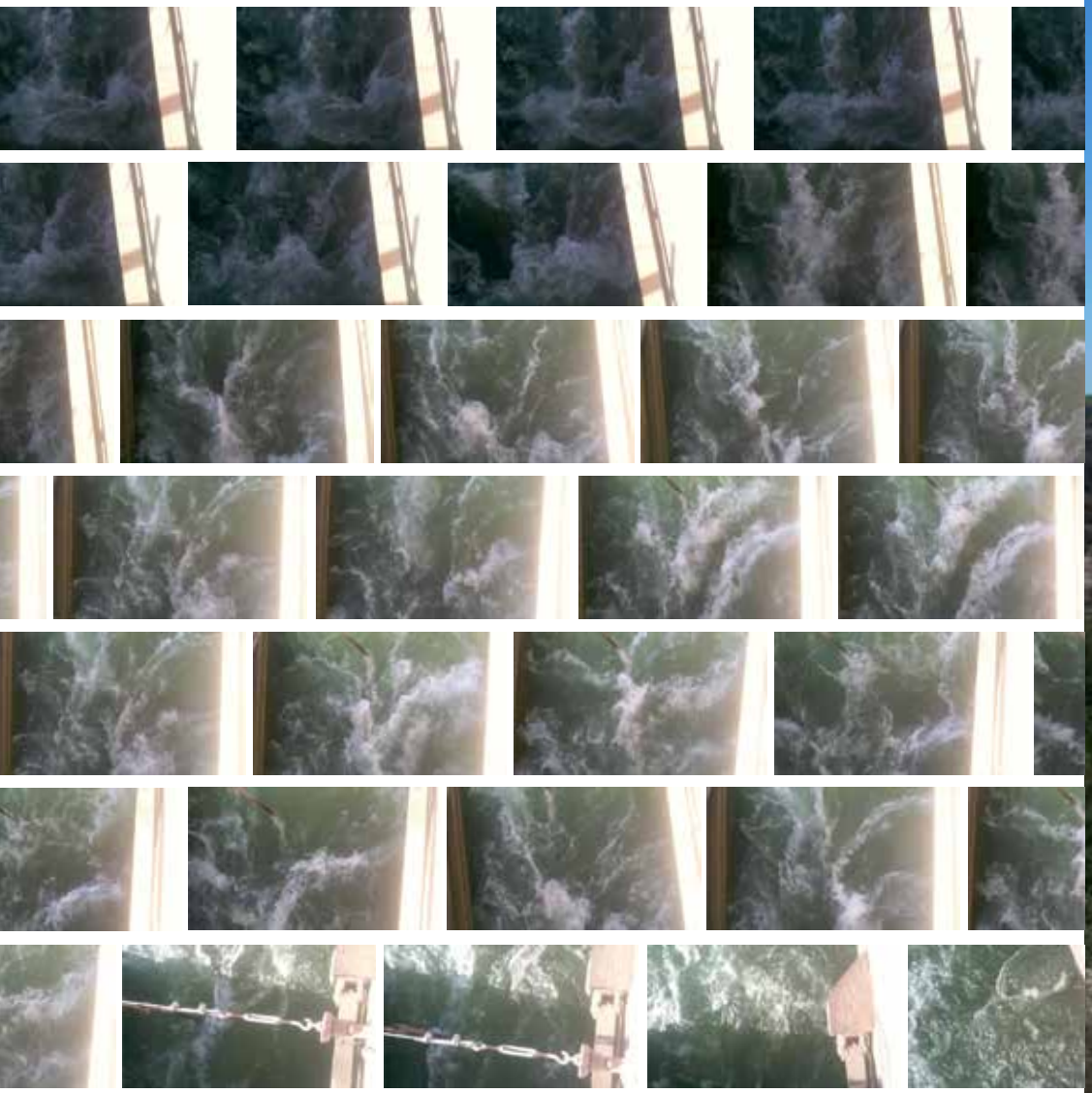
SURFACE RESERVOIRS

Surface reservoirs can be found in numerous places. Here water is kept until needed somewhere along the aqueduct system. Usually the ponds are well fenced off, in order to keep people out.

5

6

On site: dynamics



7

Water Symphony: Soundtrack of the sluices
Stills from film clip. Water movements and sounds showing the dynamic expression of water at work.

On site: rivers

All the major rivers in the area are treated as water infrastructure, but unlike the aquifers, they are not channelled into concrete structures. The rivers are also deliberately allocated for run-off drainage from surrounding fields, and the water is therefore polluted adding to the levels of toxics in the Salton Sea when discharging (deBuys & Myers 1999, p 7).

8

Green Traces of Rivers
Along the rivers large green vegetation usually thrives. Patterns of greenery tell about the dynamics of the water flow and height.

#5 THE RIVER REMAINS

LONG: 32.791067° N LAT: -115.706616° W
WEST EVAN HEWES HIGHWAY, S80
28/08/2014

WHEN SAMPLING #5:

THE GPS MAP TELLS ME THAT HERE SHOULD BE A RIVER CROSSING. HARD TO TELL, THE MIGHTY RIVER IS REDUCED TO A STREAM. ON THE SLOPE I SEE WHITE TRACES. IS IT SALT? I CLIMB DOWN IN ORDER TO TOUCH AND TASTE. I HESITATE, THINKING THAT IT´S PROBABLY FULL OF OTHER TOXIC WASTE.

WHEN LATER THINKING ABOUT SAMPLE #5:

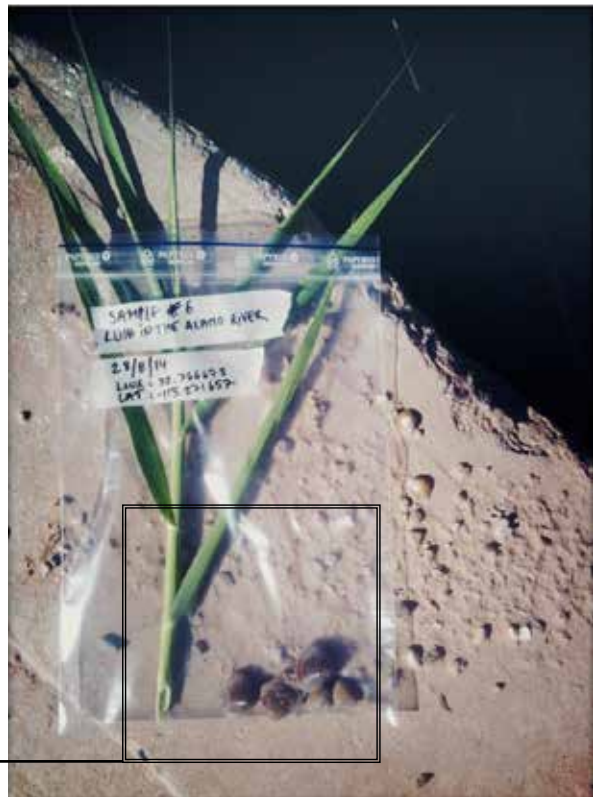
I LATER LEARN THAT ALSO EMPTY RIVERS ARE DEFINED AS RIVERS. TO BE NAMED A RIVER SIMPLY MEANS THAT IT HAS THE CAPACITY TO CARRY WATER. DURING THE TRAVELS THIS BECOMES CLEAR IN NUMEROUS PLACES. THE TRACES OF SALT IS TYPICAL IN THE AREA. AS SOON AS WATER EVAPORATES IT LEAVES TRACES OF SALT.

SALTY REMAINS FROM THE RIVER

Salt traces can be found in places like river outlets, at the declining seashore, on the edges of fields or all across abandoned lots. The water of Colorado River is notoriously famed for having a higher level of salt than other rivers, and the Salton Sea is now, partly therefore, 25% more salty than the ocean water (U.S Depertment of Interior B).

GREEN RIVER BANKS

Along the riverbanks a completely different flora, compared to the surrounding arid lands, thrives. Birds are taking advantage of the lush surroundings providing not only water but also shelter and food.



#6 LUSH IN THE ALAMO RIVER

LONG: 32.766673° N LAT: -115.27166° W
EVAN HEWES HIGHWAY, S80
28/08/2014

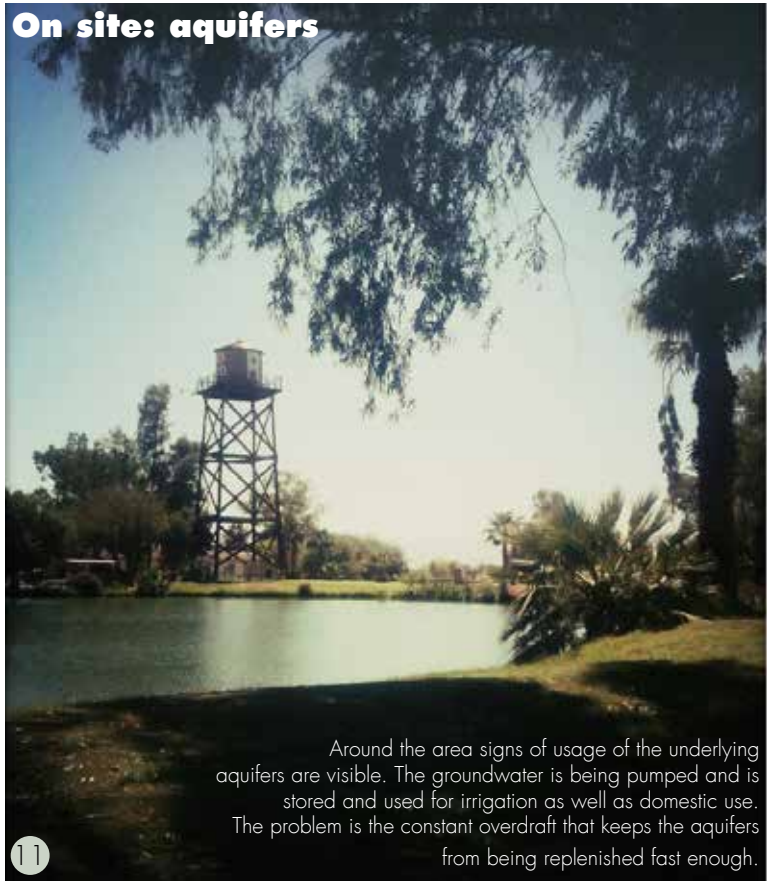
WHEN SAMPLING #6:

LATER I CROSS THE ALAMO RIVER. IT IS PRETTY WIDE AND THE WATER FLOATS WITH CURRENTS VISIBLE ON THE SURFACE. AS THE RIVER IS MORE WATERFILLED THERE ISN'T MUCH OF A SLOPE. I GET SAMPLES OF REED AND EVEN SOME SHELLS. EVEN THOUGH THE WATER ISN'T CUT OFF FROM ME WITH LARGE BUSHES THRIVING OF THE WATER, IT IS STILL HARD TO REACH THE WATER.

WHEN LATER THINKING ABOUT SAMPLE #6:

IT OCCURS TO ME THAT EVERYWHERE I SEE WATER IN THE LANDSCAPE; IT IS TREATED AS PURE INFRASTRUCTURE. WHEN THE RIVERS GETS TRANSFORMED INTO RUN-OFF DRAINS, IT LOOSES ITS VALUE AS SWIMMING PONDS OR OTHER RECREATIONAL PURPOSES.

On site: aquifers



Around the area signs of usage of the underlying aquifers are visible. The groundwater is being pumped and is stored and used for irrigation as well as domestic use. The problem is the constant overdraft that keeps the aquifers from being replenished fast enough.

11

ABANDONED WELL
Water structure left on what used to be a grape field.

12

PRIVATE PROPERTY
When having the water rights of a parcel, the owner has the right to pump water from the underlying aquifer. Simple wells are to be found in many places.

13

On site: a conversation about groundwater

The little mountain community is different from other parts of the Salton Sea watershed; it has no access of imported Colorado River water. Instead the sleepy town relies solely on the aquifer (Pitman 270814). Still the town boasts a number of golf courses and some extensive fruit, date and vegetable farms. So what is the attitude towards the overdraft of groundwater?

SPEAKING WITH DIANA & HARRY

In the town library I meet Diana and Harry. We venture into a conversation about a very current subject in the town: the use of water, and particularly the use of water from the underlying aquifers in the area.

D: Well, I don't worry too much about it. I mean they have been saying for years that we will run out of water but nobody really knows how much water there is down in the aquifer. So far we have never had any problems.

- So you don't lay awake at night worrying about water?

D: No, not at all. And what should you do? You still need to take showers and use water for cooking. The golf course and the agriculture uses far more water than we do anyway. I think there should be plans on building a desalination plant and some pipes so that we could get ocean water up here from San Diego. Then there wouldn't be a problem at all.

H: I think it's criminal to grow palm trees here and have all those golf courses. Ok if you grow food, but the palm trees are just for decoration.

- Isn't there palm date palms so you get a crop out of them?

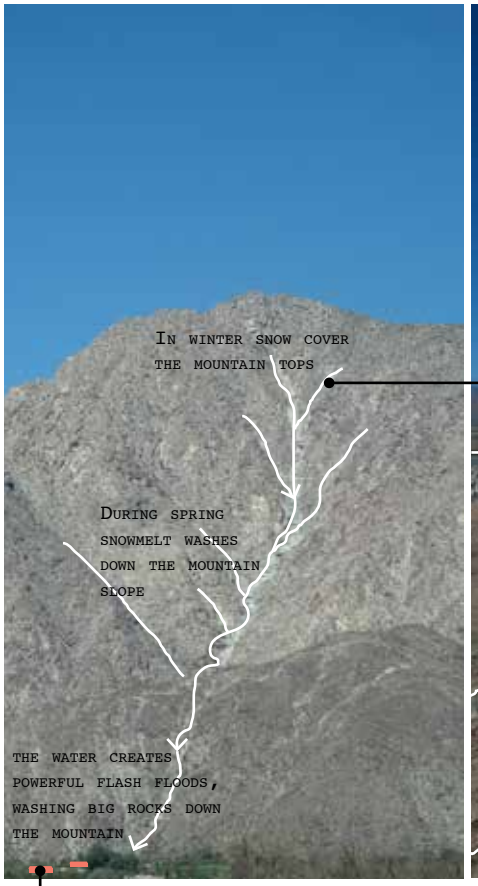
H: Maybe some but that is not defendable. And the golf courses! The farming uses 70% of the water, the golf courses 20% and the population only 10%. I grew up during the war so I know how it is to save. My wife and I have a garden but she is very good with desert plants. And whenever you have a little coffee left in the cup that you're not going to drink we pour it to the plants. But we have a pool... It was there when we bought the house and my wife is ill and needs it for exercise. I've heard it uses as much water as an equivalent sized lawn. I feel a bit guilty, but I cover it to stop evaporation as soon as we don't use it.

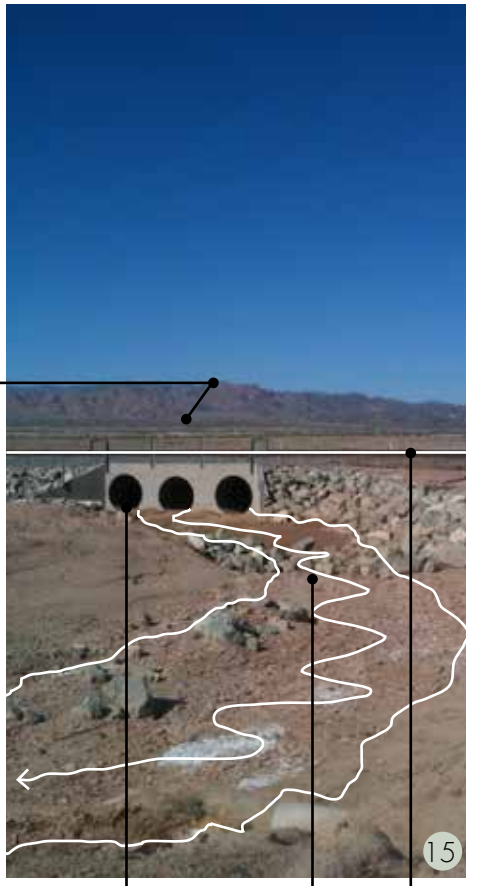
- So you are quiet worried about water?

H: Not so much for myself, I mean I am 80 years old, but I'm worried for my grandchildren. I heard about this place somewhere on the west coast where all the water has run out and they now have to use only bottled water.

On site: washes

When the snow melts during spring it causes massive amounts of water to rapidly flow down the mountainsides in so called flash floods. The rest of the year, when the area is dry, the traces from the flash floods are still visible on the mountainsides in the form of almost bare land. These bare areas are called washes. Other signs are the piles of rocks collected on the foot of the mountains and the protective infrastructure created in order to avoid costly damages.





BUILDING PERMITS

Due to the danger and flood risk one cannot build houses or other structures in the washes or too close to them.

CONCRETE WATER PASSAGE

RUN-OFF WATER

RAILWAY & ROADS

FLASH FLOODS & PROTECTIVE INFRASTRCUTURE

Flash floods have great powers and the capacity to sweep everything along its way with it. In order to protect important infrastructure such as roads and railways, aqueducts in concrete is created to allow for water to reach the Salton Sea.

DEAD FISH, A DYING SEA
On the shore of the Salton Sea there is lots of dead fish lay rotting in the sun and the smell is at times unbearable. They typically die of high salt levels and lack of oxygen caused by eutrophication and algal blooms.

16

On site: the Salton Sea

The Salton Sea is an artificial lake with no outlet. In its heday it was a busy recreation destination with a wide variety of different fish and a thriving bird paradise. Today the sea is declining and only tilapia fish can tolerate the high concentration of salt. The sea still remains an important stopover for birds on the Pacific Flyway, even though unhealthy levels of toxins have been measured in the water (deBuys & Meyer 1999).

DEAD FISH
White colour indicates dead fishes spread out over the beach

17

ECOLOGICAL HABITAT
The Salton Sea has become an important stopover for migrating birds along the Pacific Flyway.

18

BEACH AT THE SALTON SEA

19

SALTON CITY
In the 1950's a site next to the Salton Sea was prepared to be the next Riviera paradise. Electricity, roads and signs with street names was all put into what was to become Salton City (IdeBuys & Meyer 1999, p 206). The dream did not come true and most parcels remain unsold or abandoned.


20

REMAINS OF A DREAM
Shells of swimming pools, derelict kitchens and boats on dry land. The dreams of the sweet life are fading on the shores of the contaminated sea.

PHOTO INDEX: WATER SYSTEMS AT WORK

1. Channeled water, Imperial Valley
2. No trespassing, Imperial Valley
3. Sluice control, Imperial Valley
4. Irrigation canal, Imperial Valley
5. Surface reservoir, Imperial Valley
6. Sluice control, Imperial Valley
7. Water dynamics,
8. River view, New River
9. Sample, New River
10. Samples, Alamo River
11. Water storage, Imperial Valley
12. Former well, Borrego Springs
13. Private well, Coachella Valley
14. Flash flood warning, Road 111 Salton Sea shore
15. Road preotection infrastructure, Road 111 Salton Sea shore
16. Fish on beach, Bombay Beach
17. Bombay Beach
18. Bird haven, Salton Sea State Recreation area
19. Riviera keys, Salton City
20. Remains of a dream, Salton City

farming the land
_in search of agricultural practices

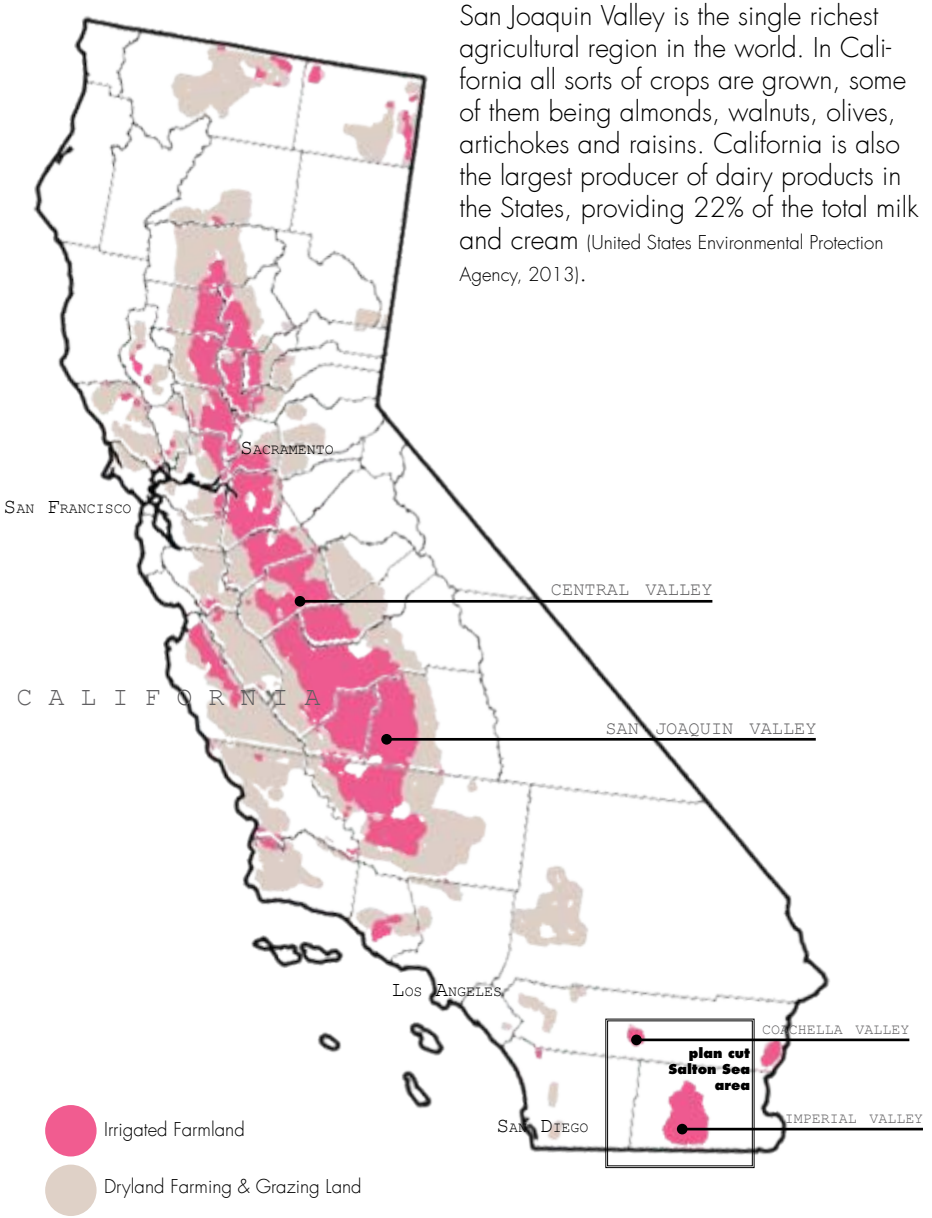
Mile after mile I pass the large-scale fields, filled with green carpets of alfalfa, or with citrus trees arranged in neat rows. In the Salton Sea area no sudden rains threaten the harvest. People can sometimes be sighted, picking crops, steering tractors, digging for drainage or in planes spraying fields with pesticides. Also the most important worker of them all can be seen - beehives are placed in large groups along the fields, bees circulating around the hives hard at work.

Everywhere is modest water-infrastructure visible; gates to irrigation channels that can be opened or closed. It is a large scale agriculture laboratory where humans are in absolute control of the crops. To my surprise irrigation are used regardless of the relentless sun, sprinklers and watering machines running at desert noon. I pass by orchards with drip irrigation and flooded date palm plantations. I become fascinated by this industrial scaled landscape, enabled through Colorado River water floating in canal systems.

Organized landscape
Rows of citrus trees, grapes and date palm trees is a common sight in the agricultural parts of the valley.

On California scale:

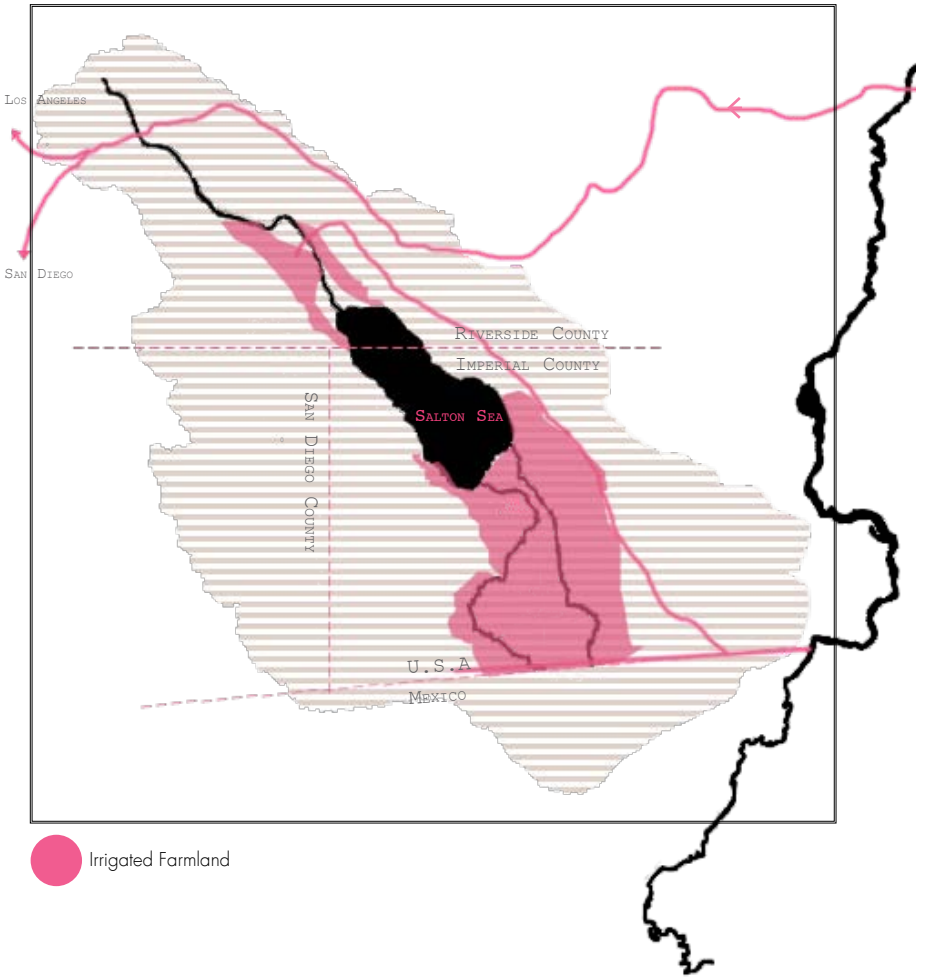
California is the top one agricultural state in the U.S, estimated to be worth $35 Billion. Out of the top ten richest counties in the U.S, nine are in California and San Joaquin Valley is the single richest agricultural region in the world. In California all sorts of crops are grown, some of them being almonds, walnuts, olives, artichokes and raisins. California is also the largest producer of dairy products in the States, providing 22% of the total milk and cream (United States Environmental Protection Agency, 2013).



Maps based on http-_calwatchdog.com_wp-content_uploads_2011_04_Farmland-California-2002.jpg, and further graphically altered by author

On local scale:

There is extensive agricultural fields in the valley, most of them located in the Imperial Valley southeast of the Salton Sea. There is also some areas remaining in the Coachella Valley northwest, where urban areas are rapidly demanding more space.



Maps based on Google Maps satellite image, and further graphically altered by author

#4 THIS IS WHAT'S THE FUZZ

LONG:33.099372° N LAT: -115.64896° W
LACK ROAD
27/08/2014

WHEN SAMPLING #4:

THERE ARE HUGE FIELDS ON BOTH SIDES OF THE ROAD. NOT MUCH WORK IS GOING ON AT THE FIELDS FOR THE MOMENT, SOMETIMES I SEE PLOUGHS BUSY PREPARING FOR GETTING NEW CROPS INTO THE GROUND. I STOP NEXT TO A GIANT PILE OF BAILED HAY, WITH SPRAY PAINTED BATCH NUMBER ON IT. I TOUCH THE RED SOIL, FEELING THE CLAY STRUCTURE AGAINST MY FINGERTIPS.

WHEN LATER THINKING ABOUT SAMPLE #4:

THE BAILS OF HAY KEEP RE-OCCURING AROUND THE FIELDS. IT HAS JUST BEEN HARVESTED AND ALL OF THE PILES ARE MARKED TO BE SHIPPED OF TO THE REST OF THE U.S OR TO ASIA. THE ALFALFA AND THE BERMUDA GRASS IS MOSTLY USED AS DAIRYFEED (JERVEY 2014). SOMEONE TELLS ME THAT ALFALFA IS THE MOST COMMON, BEING A STABLE AND SECURE CROP TO GROW. THE FARMER DON´T MAKE A FORTUNE ON IT, BUT IT IS A RELIABLE INCOME.

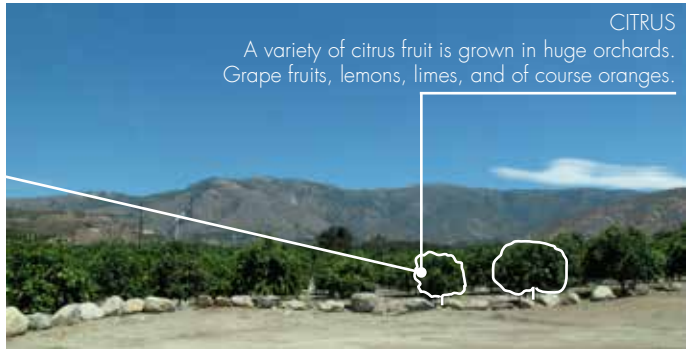
GOOD SOILS FOR GROWING

The fertile soil in the valleys is, combined with the prosperous water rights, enabling a large production of hay. Imperial County farmers produced 1,736,000 tons of hay, including alfalfa, Bermuda grass, Sudan grass and Klein grass hays in 2011. It takes about 1,8 kg of hay to produce 3,8 litre of milk (Imperial County Farm Bureau).

On site: growing the valley

In the Coachella Valley, and the Imperial Valley a wide range of crops is grown, just as in the rest of California. Fruits, vegetables and different kinds of livestock feed are all successfully grown. The area produces 80 % of the U.S winter vegetables, such as broccoli, lettuce, cauliflower, carrots, sweet corn, watermelons, cantaloupe, and onions (Than 2014). Dates are also a signature product of the Salton Sea area, with the dry climate providing perfect condition for great harvests.


3


CITRUS
A variety of citrus fruit is grown in huge orchards. Grape fruits, lemons, limes, and of course oranges.


4

VEGETABLES

Rows of vegetables, grown in monocultures over large-scale fields is a common site. The vegetables tend to be grown in slightly raised beds, improving the draining.


5

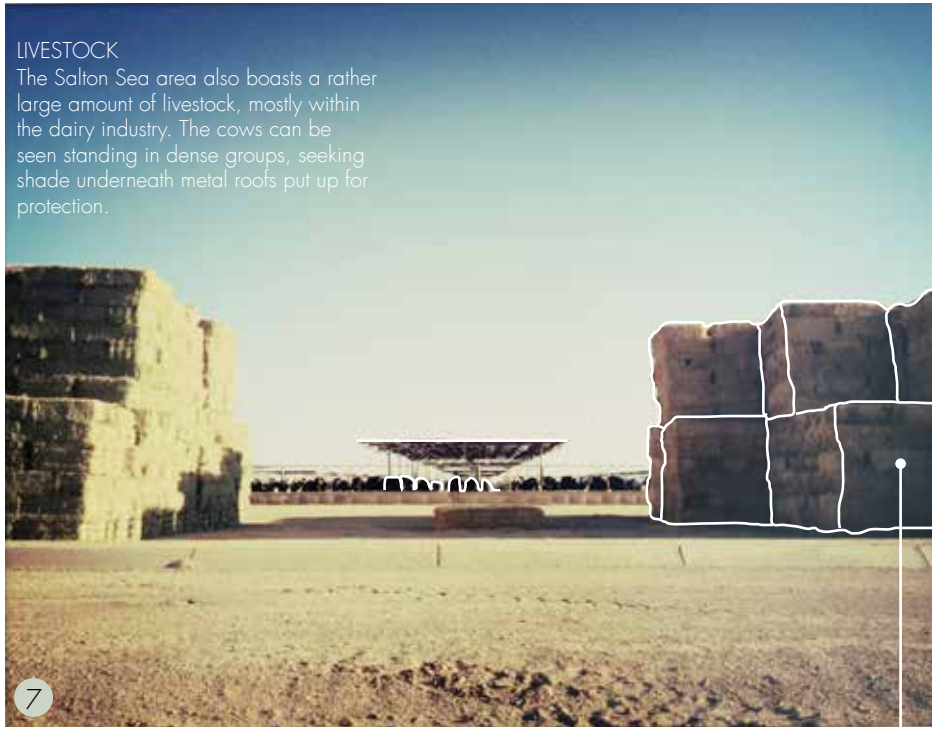
COACHELLA VALLEY DATES

Large plantations of date palm trees planted in even rows are common. To protect the dates, they are covered either with cotton bags or with paper cones.


6

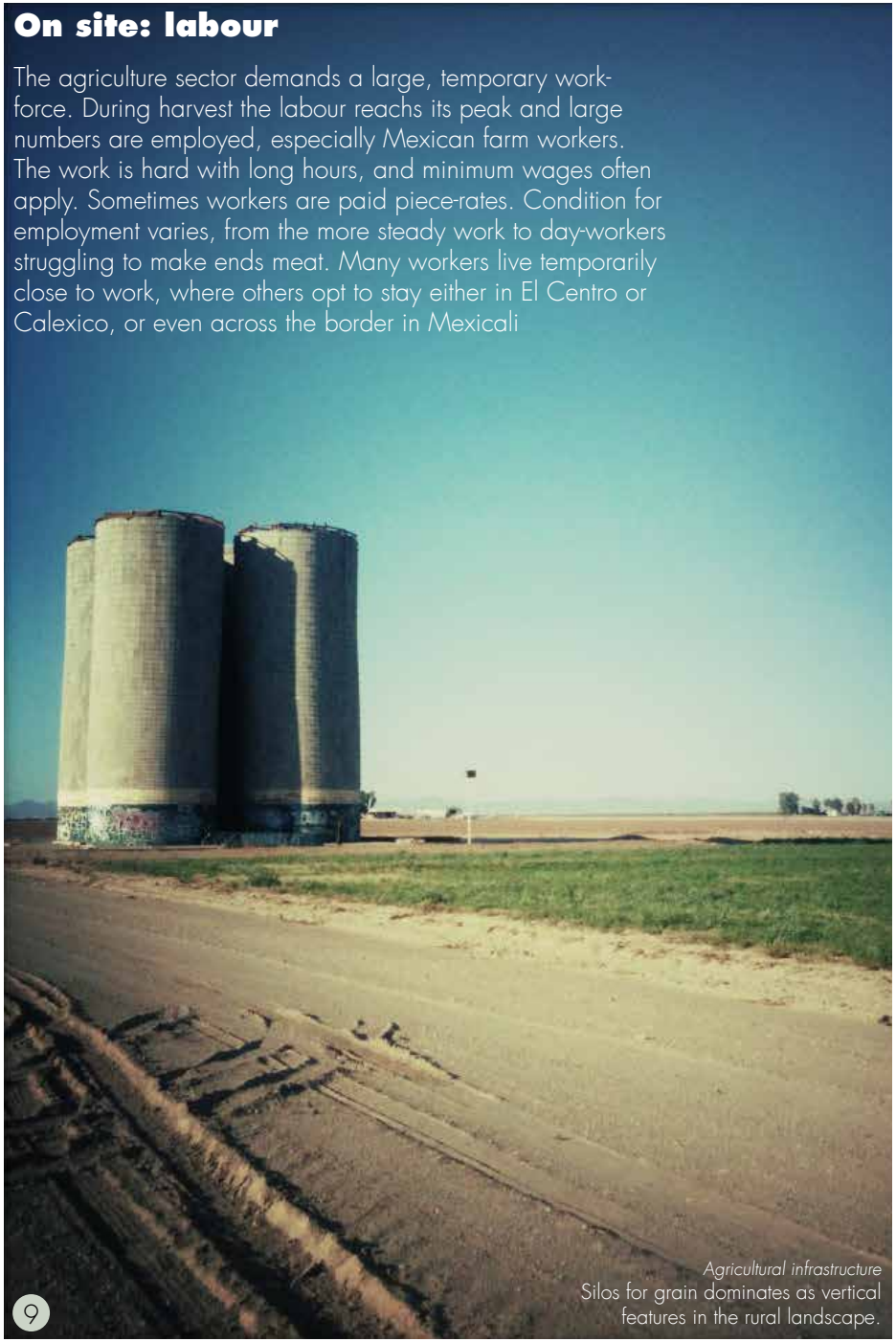
GRAPES

Even though not as famous as the Napa Valley, the Salton Sea area has some extensive wine growing. The grapes are harvested and sold both as fresh grapes and dried to raisins. Many of the vineyards are irrigated through drip systems, and the branches are carefully trained to optimize sun exposure.



On site: labour

The agriculture sector demands a large, temporary workforce. During harvest the labour reachs its peak and large numbers are employed, especially Mexican farm workers. The work is hard with long hours, and minimum wages often apply. Sometimes workers are paid piece-rates. Condition for employment varies, from the more steady work to day-workers struggling to make ends meat. Many workers live temporarily close to work, where others opt to stay either in El Centro or Calexico, or even across the border in Mexicali

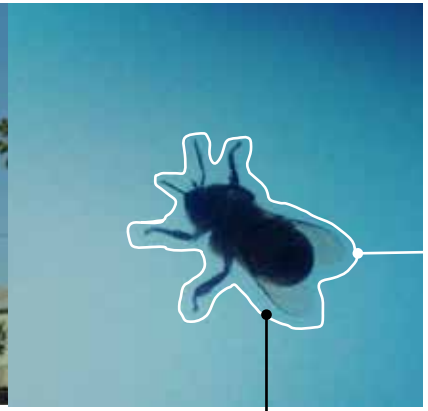


PREPARING FOR HARVEST
The large fields demand efficient machines in order to maximize economical benefits. Machines are sometimes seen parked next to field, in preparation for harvest.

10

THE LARGE SCALE FARM
In order to handle the large quantities of produces; farms need storing facilities on industrial scale.

11



13

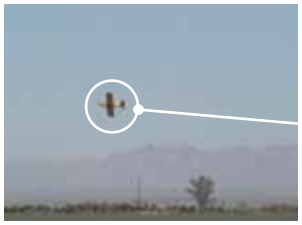
12

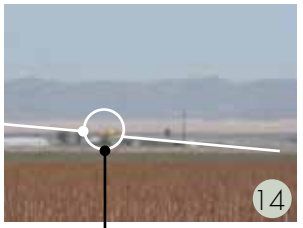
MANAGING FIELD & FARM

In between harvests the field needs preparing. While the owners are on vacation, a farm manager often handles the farm, making sure preparation such as ploughing are made.

BEES AT WORK

Bees are of great importance in the agriculture, responsible for pollinating crops and ensure a good harvest. There are companies who operates and rent out beehives to farmers, and the hives are placed by the side of the fields.





14

SPRAYING PESTICIDES

The agricultural fields are often too large to be managed easily from the ground. In convential farming the fields are sprayed with pesticides from time to time, keeping insect attacks at bay. This is often done by plane. The plane then circulates over the field, navigating through advanced coordinate systems.

#8 CLEANING PIPES, GROWING ALFALFA

LONG:33.029685° N LAT: -115.38398° W
W CHALUPNIK ROAD
29/08/2014

WHEN SAMPLING #8:

CARTER RUNS A BUSINESS PUTTING IN DRAINAGE ON LARGE FIELDS. WE DRIVE OUT TO A FIELD IN IMPERIAL VALLEY, WHERE A COUPLE OF GUYS ARE DOING SOME MAINTENANCE WORK JUST BEFORE THE FIELD IS PREPARED FOR NEW CROPS. THE SUN IS RELENTLESS, AND RUDI WHO IS FLUSHING THE PIPES, EXPLAINS THAT IT IS BUSY TIMES NOW, WORKING LONG HOURS TO FINISH ALL THE FIELDS THAT NEED WORK DONE. HE IS FROM MEXICO, AND LIVES IN CALEXICO. JUST AN HOUR DRIVE, HE SAYS, ITS GOOD.

WHEN LATER THINKING ABOUT SAMPLE #8:

CARTER TELLS ME ITS GREAT BUSINESS FOR HIS COMPANY RIGHT NOW, EVEN THOUGH THE DROUGHTS ARE AFFECTING CALIFORNIA. 'A LOT OF FARMERS UP IN SACRAMENTO IS TRANSFORMING FIELDS INTO WALNUT GROVES', HE EXPLAINS, 'SO WE'RE DOING QUITE A BIT OF WORK UP THERE NOW'.

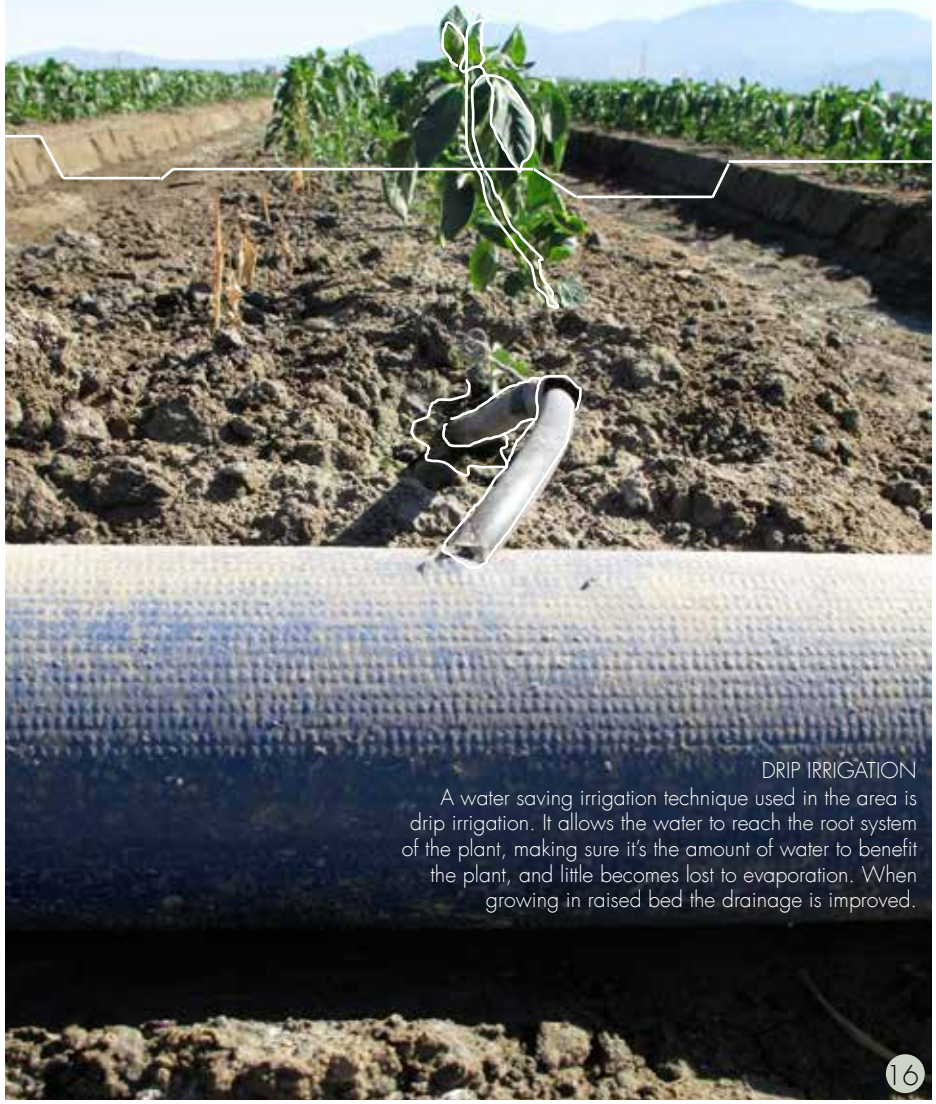
15

CLEANING PIPES

Mud is cleaned out of the pipes in order for them to function properly. To produce great harvest, as the staple goods alfalfa, the fields must have properly drainage in place. Workers are employed in three categories; the managers who has been at the company for a long time and have great experience and education, the seasonal workers, and - the workers employed on short-term premises. They are also paid the least (Taylor 29/08/2014).

On site: irrigating arid land

There are a number of engineered watering techniques applied in the Salton Sea area. Among the most common is drip irrigation, compartilization and flooding, sprinkler systems and large scale watering machines. Where some techniques are used for the low-cost system and its convenience, others help keep down the amount of water used. Of highest importance is also well working drainage, enabling excess water and salt to be removed from the fields.



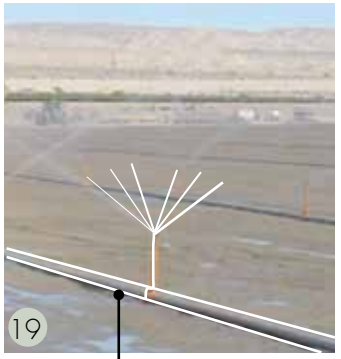
DRIP IRRIGATION
A water saving irrigation technique used in the area is drip irrigation. It allows the water to reach the root system of the plant, making sure it's the amount of water to benefit the plant, and little becomes lost to evaporation. When growing in raised bed the drainage is improved.

16

COMPARTILIZATION/FLOODING
Preparing for crops. By constructing small compartments on a field, the water is kept evenly distributed for a little longer when flooded in order to irrigate crops.

17

18



19

SPRINKLER SYSTEM
Sprinklers are used as an easy and cheap irrigation system. The sprinklers are used regardless of time, many of them used during the hottest hours of the day, using a large amount of water. Pipes standing waiting on the side of a field is a common feature in-between harvest.

DRAINAGE

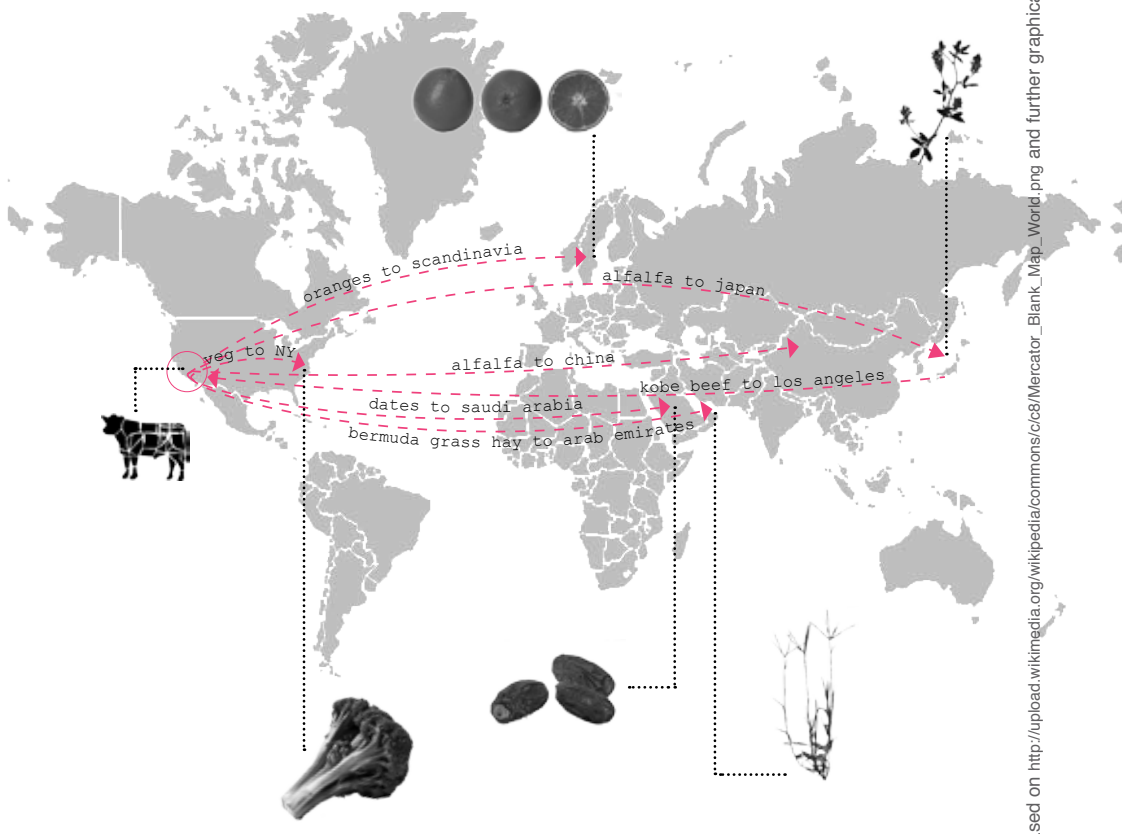
In order to produce well, the fields are mostly equipped by underground draining pipes. It helps leading excess water and salt of the fields into sewage canals discharging in the Salton Sea. There should also be a 3% grade on the field to prevent bad drainage. Air photos can tell if there's drainage pipes installed on the fields, visible as striped crop-patterns.

WATERING MACHINES

Another watering technique involves large watering machines, either attached forming so-called pivot irrigation fields, but in the Salton Sea area more common as straight arms irrigating large, square fields.

On regional scale: what to where?

The Salton Sea area is contributing to the food supply, not only nationally, but also internationally through an extensive export market. One of the most exported crops is alfalfa, often used as feed in diary production. The hay is packed into bales, and shipped out from Long Beach towards destinations as Japan, China and United Arab Emirates. The export is increasing fast, export to China alone rising 200 times in five years. The export is predicted to increase, as countries in the Middle East are banning growth of hay due to limited water supply. 50 % of the alfalfa grown in the Imperial Valley is currently exported overseas (Jervey 2014). It is not only hay being exported nationally and internationally, other popular crops are for example vegetables, fruits and dates.



Alfalfa to Japan - Kobe beef to Los Angeles
Map suggesting some of the export patterns of the Salton Sea area.

Maps based on http://upload.wikimedia.org/wikipedia/commons/c/c8/Mercator_Blank_Map_World.png and further graphically altered by author

PHOTO INDEX: FARMING THE LAND

1. Field Structure, Mecca
2. Hay bales, field close to New River
3. Citrus grove, Borrego Springs
4. Date palm plantation, Indio area
5. Vegetable field, Imperial Valley
6. Vineyeard, Coachella Valley
7. Dairy Farm, Imperial Valley
8. Bale of Hay ready for export, Imperial Valley
9. Silo & graffiti, Imperial Valley
10. Agricultiral equipment, Imperial Valley
11. Farm, Imperial Valley
12. Ploughing fields, Coachella Valley
13. Beehives, Imperial Valley
14. Spraying pesticides, Imperial Valley
15. Draining maintenance, Imperial Valley
16. Drip irrigation field, Coachella Valley
17. Compartilization, Imperial Valley
18. Awaiting irrigation system, Imperial Valley
19. Sprinkler system, Coachella Valley
20. Irrigation canal, Imperial Valley
21. Sewage Canal for drainage water, Imperial Valley
22. Watering Machine, Imperial Valley

lush living
_in search of (sub-)urban expressions

When traveling through the urbanized areas, I became aware of the green aesthetics that keeps repeating itself. Lush green lawns, golf courses, irrigated flower beds - it is as if we weren't in the desert. The contrast between non-irrigated and irrigated land becomes crystal clear - at one side of the road there's green, on the other there's sand and hardy desert shrubs. Water is again visible, direct or indirect.

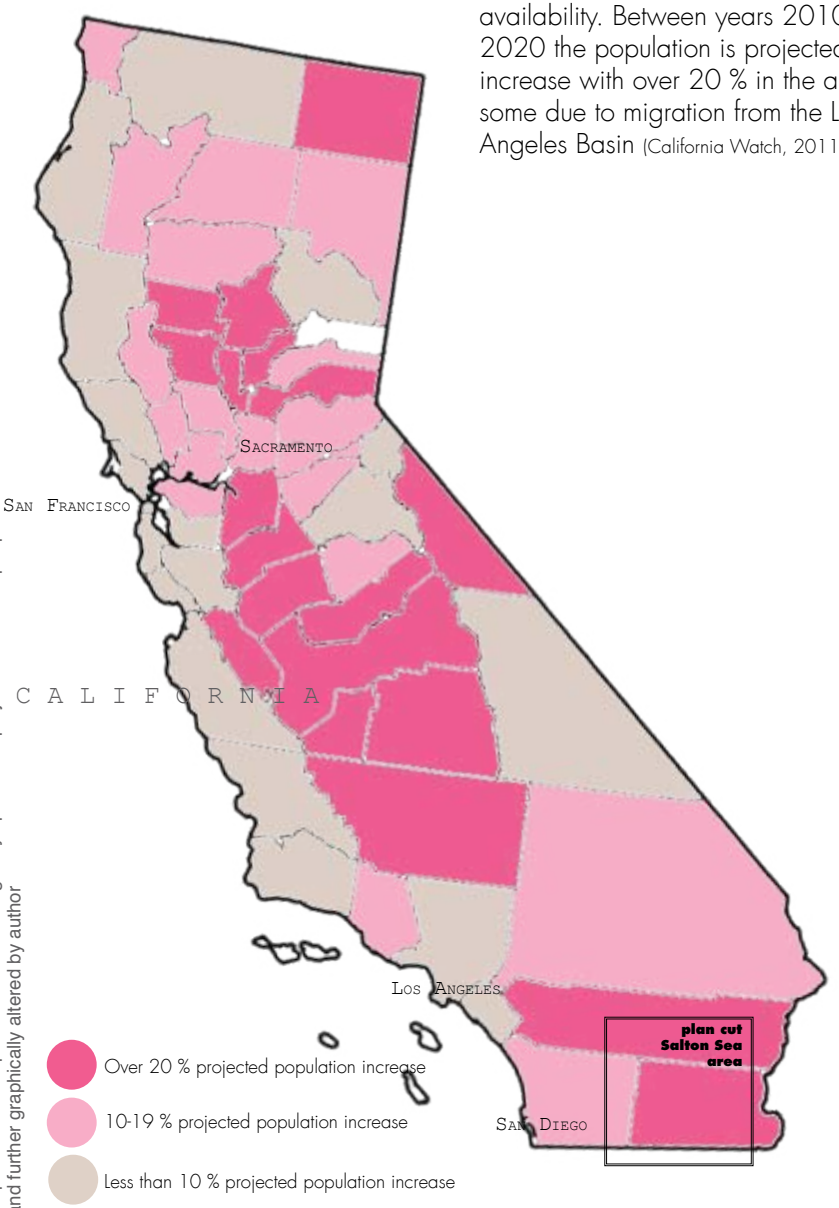
I passed by drip irrigated flower beds along the urban streets, water hosed private parcels and sprinkler systems watering large park lawns in full sun. Following clues on water constructions in the urban landscape, it came to reveal attitudes towards water use and the right to the landscape.

1

Lush in the desert
Irrigated golf courses are a common sight in wealthy, urbanized areas.

On California scale:

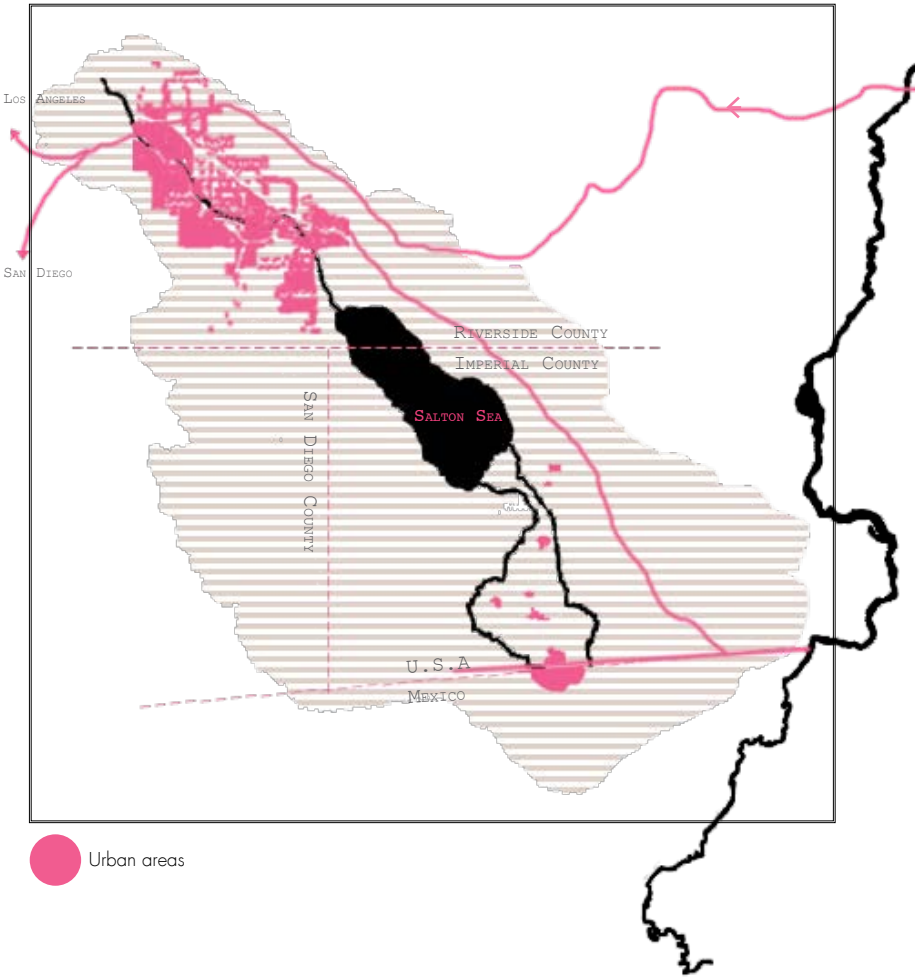
The urbanization rate is increasing in the Salton Sea area, replacing agriculture with urban housing. This poses further, future demands on the water availability. Between years 2010 - 2020 the population is projected to increase with over 20 % in the area, some due to migration from the Los Angeles Basin (California Watch, 2011).



Maps based on http://californiawatch.org/dailyreport/state-projected-add-43m-people-2020-11066 and further graphically altered by author

On local scale:

Most urbanized areas are located northwest of the Salton Sea, in a cluster around Palm Springs. In the south there is a number of smaller, agriculture towns, and across the border the city of Mexicali is spreading out.



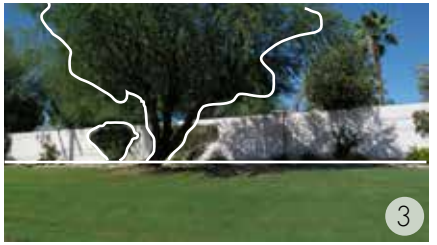
Maps based on Google Maps satellite image, and further graphically altered by author

On site: luscious greenery

The urban areas are dominated by a lush green aesthetic. It is showcased in public spaces such as formal space, parks, and sports fields as well as in private parcels and luxurious gated communities and hotel complexes.

Desert rider
Formal public space with representative statue, lawn and annuals.

2



3

LUSH STREETSCAPES

When driving in the more urban parts of the Salton Sea area, lush streetscapes emerges. Its function is to provide scenery for drivers. The large palm trees are potentially great for shade when spending time outdoors. Alongside traffic however few pedestrians spend time, and the spaces becomes purely representative.

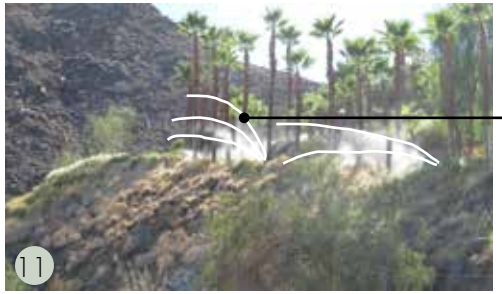
4

5

LAWNS IN PUBLIC SPACE

Green lawns seem mandatory as aesthetic expression and are found in almost all public space - parks, sports facilities, and open spaces in front of public buildings.

On site: irrigation & maintenance



IRRIGATION

Large vegetated areas demands a lot of water, and some of them are irrigated with the help of sprinkler systems. The sprinklers are often seen running in the middle of the day, at the hottest hours, allowing a lot of water to evaporate in the sun.

'LANDSCAPING'

Grass areas are managed to perfection, demanding regular use of fertilizers. When cutting the grass really short it also becomes more exposed to drought, and in turn demands more water to stay lush and green.

Poolside
Lounge chairs provide holiday comfort around the swimming pool.

On site: water features

The warm weather makes the desert a great vacation spot. Many hotels and motels offers swimming pools, where some of the larger ones have created water palaces featuring numerous pools and hot tubs, fed by water from private wells.

12

RESERVE RETENTION POND

Retention ponds in the area are sometimes used for public, recreational purposes. While not allowed to swim in, campgrounds are located close to them and fishing is often allowed. Green parks are often surrounding the areas, and an entry fee is usually charged.

13

14

DECORATIVE ELEMENT

Water features as fountains and water plazas are often seen in the more luxurious, urban areas.

15

PATIO WATER MIST

During the hottest hours some of the more up-scale restaurants sprays water mist on the patio, in order to cool down the temperature.

On site: golf courses

Between Indio and Palm Desert stretches 'Country Club Drive', famous for a dense gathering of golf courses. Palm Desert is well-known for its golfing opportunities, and around the city more than 30 courses are spread out, adding in numbers up to approximately 100 when counting the nearby area (JW Marriott, 2015). Desert Willow Golf Resort is owned by the city of Palm Desert and was created in 1997 in order to increase tourism and revenue to the City. Golf is a popular activity in the area and the golf course also offers discounts to residents of Palm Desert (City of Palm Desert, 2015).

PONDS AND WATER FEATURES
LAWNS AND GOLF COURSES

Some of the country clubs, greenery, and water features along Country Club Drive.

Maps based on Google Maps satellite image, and further graphically altered by author

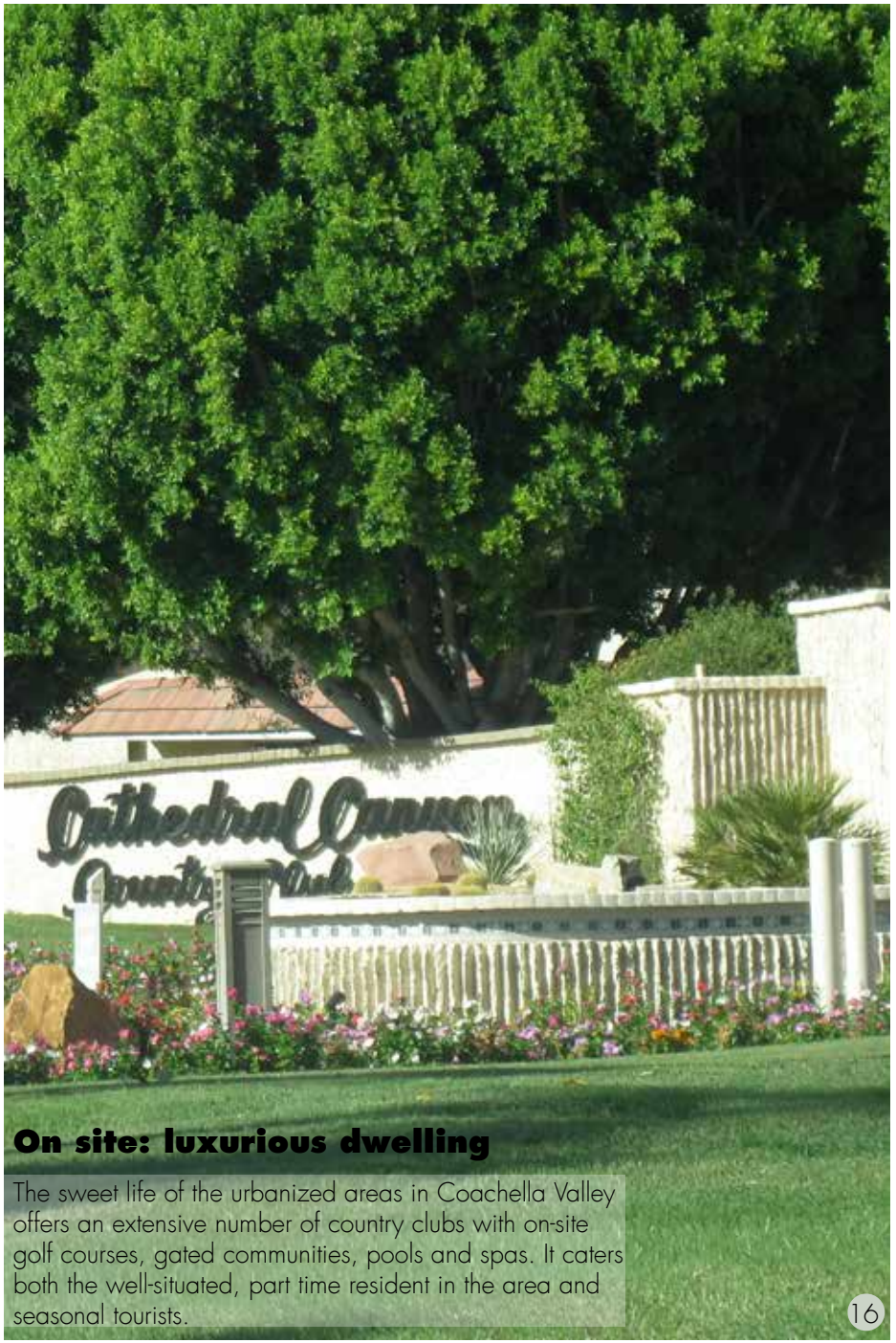
On site: talking about golf course management

In Palm Desert and adjacent areas in the Coachella Valley, the interest in golf is huge. The area boosts an unbelievable number of golf courses, many of top quality. Golf courses are also responsible for a large portion of the water used, and I wonder if this is of any concern when managing the facilities?

SPEAKING WITH JONAS & GLORIA

In the golf shop of the resort, I meet Jonas and Gloria. We venture into a conversation about golf course management, water use and customers expectations.

J: We have to re-grass the courses completely twice a year. You see, there is one type of grass that is good in the summer, and another one good for winters here. And of course we need to use fertilizers, and the schedule for when to cut the grass and to what length is decided by our green manager. He's new, but is doing a great job.
- So how often do you need to water the greens?
J: It depends on the heat of course. But generally ones or twice a day. It's not really a problem; we have our own well, which makes it cheaper. All golf courses around here have their own wells. And the customers just don't accept if the greens are turning brown. Then people start to complain and won't pay for playing here. I mean, this is a top facility, and the standard has to be high.
- Do you recycle any of the water?
J: Yeah, we just started a program where some of the water is recycled in the ponds you see out on the greens.
G: Do you play?
- No...do you?
G: Haha, no... I've worked here for 17 years but I don't play. But most people around here do. You should go visit the collage here in Palm Desert - they have an education on golf course design and maintenance. And the junior team are training here at our place. Do you speak Spanish? Then you should meet Eduardo. He cuts the grass here, but his English is still so bad so I can't understand him even after all these years...
J: The whole hotel, spa and golf course employs 2000 people, it's a big thing here.



On site: luxurious dwelling

The sweet life of the urbanized areas in Coachella Valley offers an extensive number of country clubs with on-site golf courses, gated communities, pools and spas. It caters both the well-situated, part time resident in the area and seasonal tourists.

16

GATED COMMUNITIES

In the more urbanized areas of Coachella Valley a large number of residential gated communities can be sighted. These are closed off to the public, guarded with surveillance cameras and often security guards. From the outside, one can glimpse well maintained landscaping.


17


18

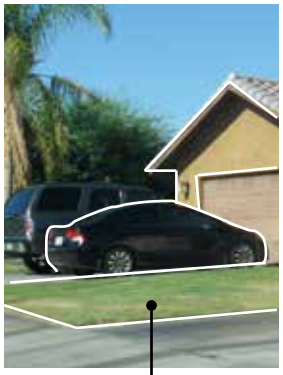
RESORTS

The valley has an extensive tourism sector and many large hotels and resorts run their own golf courses. These are mostly watered with private wells pumping ground water. Lately there has been an increase in the re-use of the water used for irrigation.

On site: suburban expressions

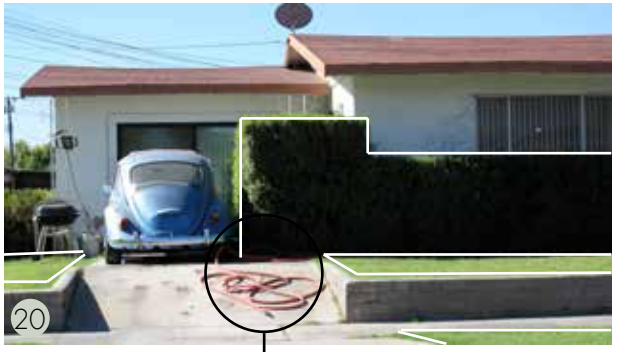
The Bungalow, frequently featured in the area, is often combined with representative lawns facing the street. The lawns serve as a purely decorative element and demand an intense watering and care in the desert climate. Despite its practical disadvantages it remains popular, and has come to represent the middle class lifestyle.


19



FRONT-LAWNS

Private parcels with classical front lawns requires daily watering - sometimes even twice a day to keep the green colour.


20

WATER HOSES

Water hoses are a common sight on private parcels, used to keep the representative lawns & vegetation outside the house green and fresh.

PHOTO INDEX: LUSH LIVING

1. Golf course, Palm Desert
2. Public space, Palm Springs
3. Street side planting, La Quinta
4. Street side planting, Palm Springs
5. Street side planting, Coachella
6. Sports field, Indio
7. Golf course, Mecca
8. Public park, Brawley
9. Retention pond, La Quinta
10. Spirnkler system, Rancho Mirage
11. Irrigated terrain, Palm Springs
12. Pool side resort, Desert Hot Spings
13. Mediterranean inspiration, Rancho Mirage
14. Water plaza, Palm Desert
15. Misty patio, Indio
16. Country Clun, Rancho Mirage
17. Gated community, Palm Desert
18. Luxury resort, Palm Desert
19. Fron lawn, Palm Springs
20. Drive way, Palm Springs

Chapter 3:

The Act of Challenging Business as Usual

Chapter 2 investigated three themes of land use that can be regarded as land colonization. The themes of water systems at work, large scale agricultural practice and the aesthetic expression of lush living all explored how dynamics of land use and attitudes can lead to an over-use of the resources available.

In this chapter I would like to devote some effort to further explore yet another set of attitudes and land use; The Act of Challenging Business as Usual. In the chapter, three themes with examples of practices of a more site specific, appreciating nature in the Salton Sea area will be studied. The intention is, through the themes of The desert is a dry garden, Growing food for local markets, and Home on wheels, to trace another water construction through observations of situations, sites and atmospheres.

1. The Desert is a Dry Garden
The subchapter The Desert is a Dry Garden examines the expression of the local desert landscape. The Mojave Desert and the Colorado Desert converge in the area, making the landscape both local and unique. By examining wild dynamics and the domestic use of dry land plants, landscape formations shaping the valley and its eco-system, the subchapter tries to understand local adaptation in the harsh landscape. By studying both the wild expression, and its domestication, attitudes towards water use and the relation to the landscape can be understood.

2. Growing Food for Local Markets
As previously discussed the agricultural sector is large in the Salton Sea area, and it uses lots of water. That makes it interesting to also search for alternative, local practice, aiming at a less exploitable agricultural practice. In Growing Food for Local Markets the very limited presence of local market and production is studied. Traditional crops and food practices, the strong local presence of Mexican cuisine and the 1950's signature date shakes are examined as alternative or local food practices, as well as newly established microbreweries and farmers running ecological farms, connecting both to local produce and to the regional/global food scene.

3. Home on Wheels
In the last subchapter, Home on Wheels, the attention is brought to the strong local presence of mobile homes, organized in Recreational Vehicle (RV) Parks or in loose communities practicing different levels of 'off-the-grid' living. The intention here is to investigate what different attitudes towards life in arid lands, and to water and other resources used, might be serving as driving forces. In order to understand the phenomena of mobile homes, some local off-the-grid formations and its aesthetic appearance is examined. Local expressions of DIY art, the local presence of situated desert art and the 'trash to treasure' aesthetic and mindset is of interest. The historical roots of temporary dwelling in America are also briefly examined.

the desert is a dry garden
_in search of local adaptation

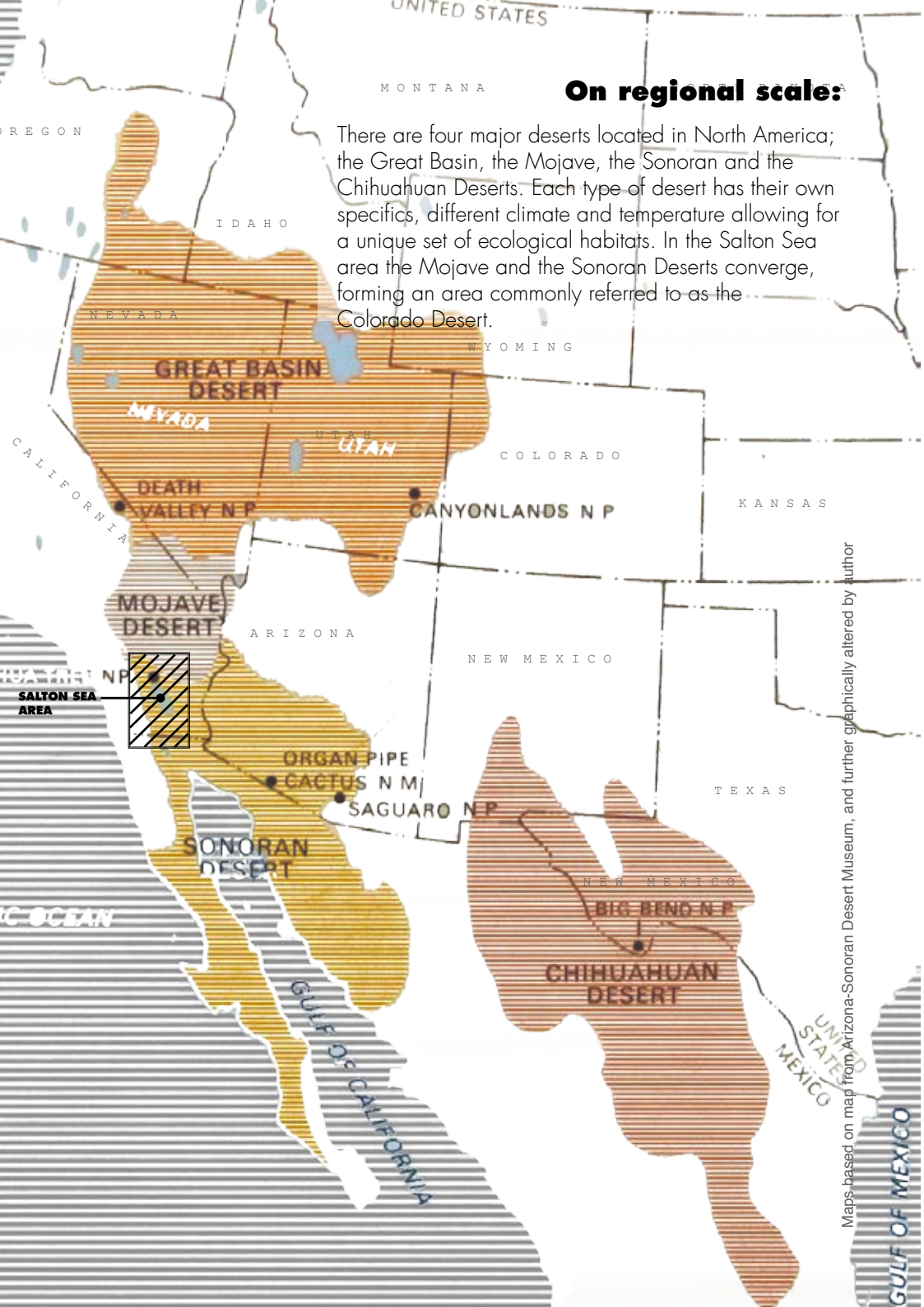
On my travels around the watershed I did not only come across the lush expression of suburbia, but rather it seemed like unnatural green oases between the more common wild exprression of the desert; the arid beauty of the sandy landscape. The arid encounters ranged from breathtaking beauty; marveling about the romantic shimmer of the wide-stretched landscape, to the more subtle and mundane land commonly seen. In between fields and mountains, on empty plots, and on rural roadsides the ordinary desert landscape emerged. Wide stretches filled with Creosote bushes, trying to tie the sand to the ground.

In the search for water constructions I was amazed how plants and animals had adapted to the landscape, possible even more so as the air was trembling by the heat in the middle of the day. Along the line I also stumbled upon people and creations embracing the arid beauty, learning lessons about adaptation from the wild.

Joshua Trees thriving in desert land.
As solitaries, but yet arranged in a loose group they suddenly appear. Not really a tree, but rather a species of yucca, the Joshua Tree is a signature of the Mojave Desert. Able to grow over 40 feet tall, it's well adapted to harsh desert life, growing with its wild arms in strange shapes.

On regional scale:

There are four major deserts located in North America; the Great Basin, the Mojave, the Sonoran and the Chihuahuan Deserts. Each type of desert has their own specifics, different climate and temperature allowing for a unique set of ecological habitats. In the Salton Sea area the Mojave and the Sonoran Deserts converge, forming an area commonly referred to as the Colorado Desert.

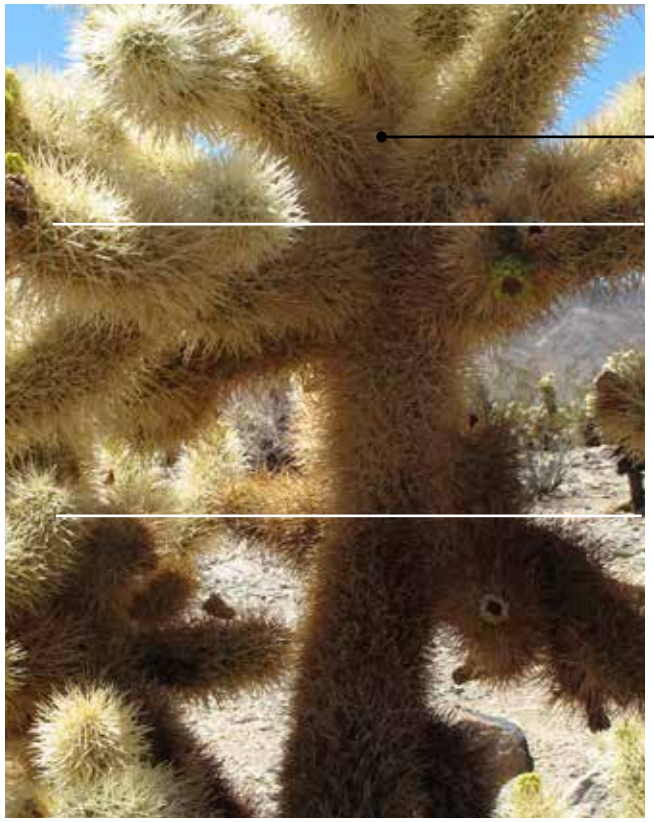


Maps based on map from Arizona-Sonoran Desert Museum, and further graphically altered by author

On site: 8 x still frames

2

The wild bees
Stills from film clip. Wild bees drinking water at temporary water spot. The bees sometimes get aggressive in desperate search for water, especially during dry high summers. Wild herbs as lavender make it the perfect habitat for the bees.



TRICOLORE:

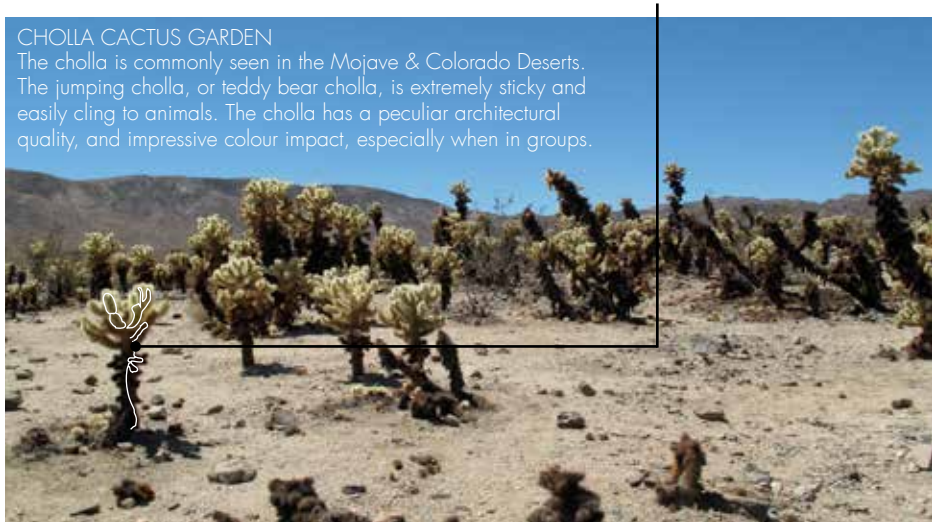
LIGHT GREEN/YELLOW

LIGHT BROWN

DARK BROWN/
BURNED BLACK

ARCHITECTURAL SHAPE

CHOLLA CACTUS GARDEN
The cholla is commonly seen in the Mojave & Colorado Deserts. The jumping cholla, or teddy bear cholla, is extremely sticky and easily cling to animals. The cholla has a peculiar architectural quality, and impressive colour impact, especially when in groups.



3

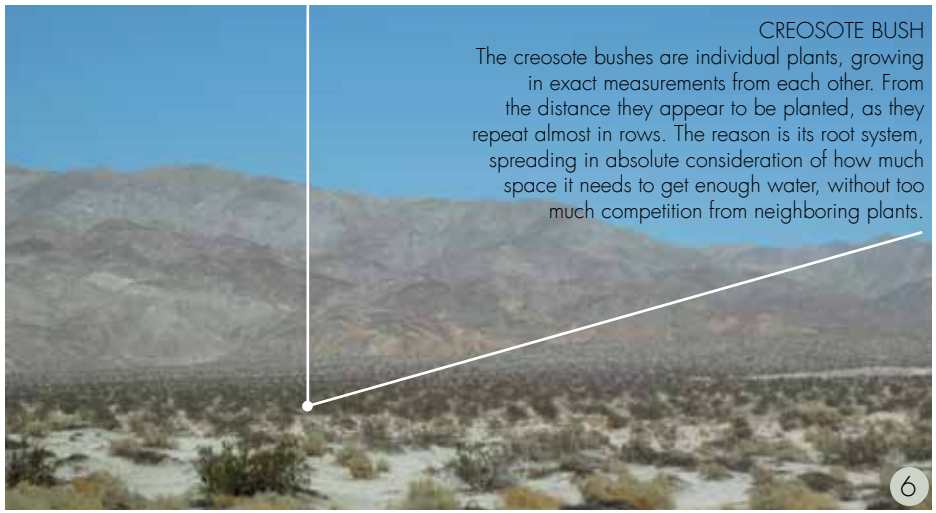
On site: adaptation & wild arid beauty

The wild plants are well adapted to life in arid lands, demanding little water and making use of whatever is available. The colour palette is pastel, blending well with the surrounding landscape.

4

5

CREOSOTE BUSH
The creosote bushes are individual plants, growing in exact measurements from each other. From the distance they appear to be planted, as they repeat almost in rows. The reason is its root system, spreading in absolute consideration of how much space it needs to get enough water, without too much competition from neighboring plants.

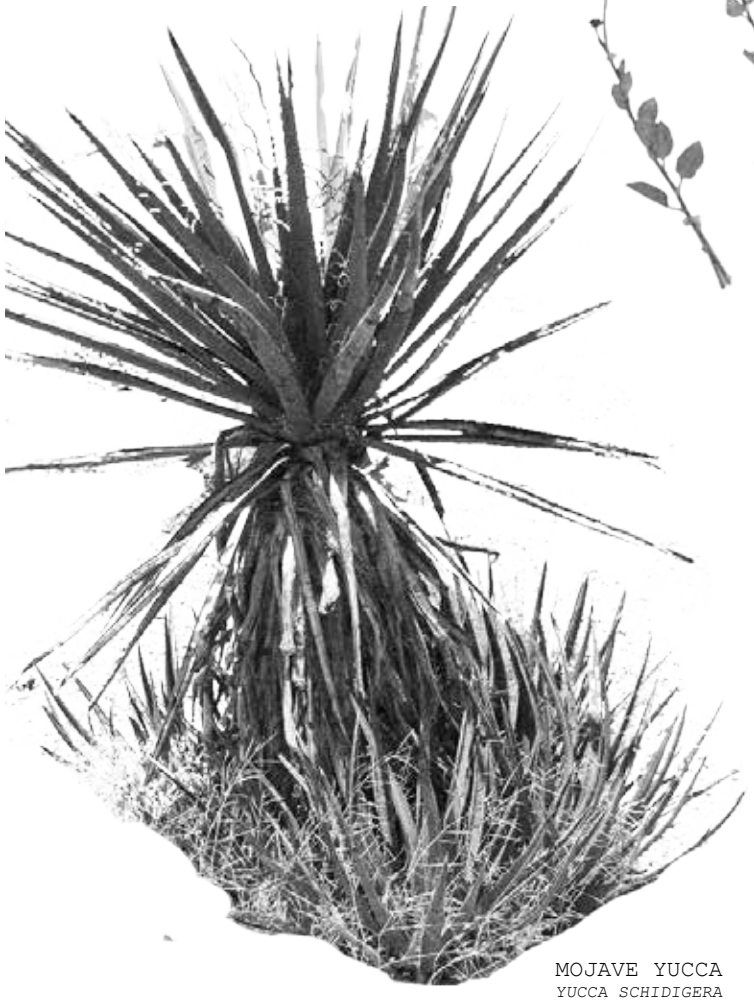


6

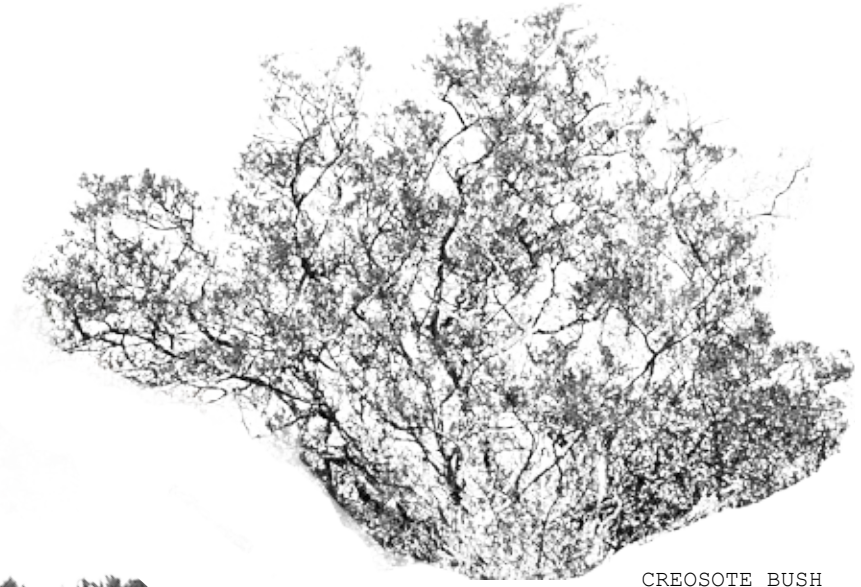
COMMONLY SEEN, NATIVE SPECIES:

In the area some plants are specific to certain types of desert, where as others are more commonly spread. Examples of some of the commonly seen plants are the Brittlebush, The Creosote bush, Desert Fir, and the Mojave Yucca. The Giant Golden Barrel Cacti are seen both in the wild, and also increasingly as planted in domestic spaces.

BRITTLEBUSH
ENCELIA FARINOSA

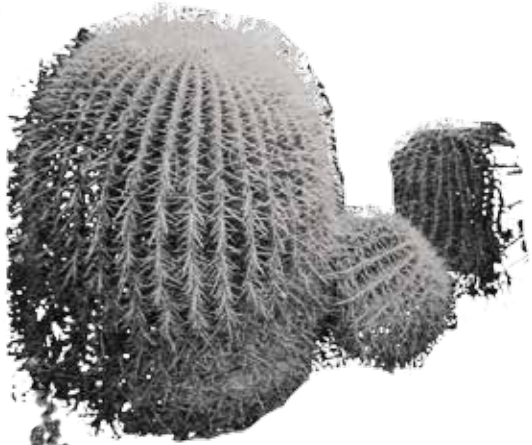


MOJAVE YUCCA
YUCCA SCHIDIGERA



CREOSOTE BUSH
LARREA TRIDENTATA

DESERT FIR
PEUCEPHYLLUM SCHOTTII



GIANT GOLDEN BARREL CACTI
ECHINOCACTUS GRUSONII

BURRO BUSH
AMBROSIA DUMOSA

On site: traces of water

The San Andreas Fault is formed at the meeting point of the Pacific Plate (to the west) and the North American Plate (to the east). The fault stretches from north California down to close to San Bernardino. It then continuous further southeast in a number of branches, the Mission Creek running along the Coachella Valley. The fault is clearly visible from the air, as it organizes landscape elements along it.

LINEAR STRETCH OF THE MISSION CREEK, A BRANCH OF THE SAN ANDREAS FAULT

Maps based on Google Maps satellite image, and further graphically altered by author

MISSION CREEK

The linear configuration of Indio Hills is running along the Mission Creek. The difference in vegetation is visible when carefully reading the landscape, as oases of fan palms and sand dunes are collected here. The sand dunes are formed when sand is washed down the mountains during the summer rains, and then shaped into dunes by heavy winds.

THOUSAND PALMS OASIS

In The Coachella Valley Preserve two types of rare habitat are protected; blow-sand fields and palm woodlands. The Thousand Palms Oasis is one of the largest fan palm oases in the state. The palms are able to grow here, despite their shallow root system, as ground water escape to the surface when it hits the fault, running through the area.

Walking in the palm tree woodland
The fan palm trees are native to the area and provide a jungle like experience when walking underneath, inside the lush oasis. It's a slightly exotic feel, as is stands out from the arid landscape elsewhere present in the area.

#7 THE DUNES, STAR WARS IMPERIAL

LONG:32.984516° N LAT: -115.139459° W
BEN HULSE HIGHWAY, 78
28/08/2014

WHEN SAMPLING #7:

EVEN KNOWING IT WILL BE A PRETTY IMPRESSIVE DUNE SYSTEM AT SIGHT, I GET AMAZED (AND A BIT SCARED) WHEN STEPPING OUT ON THE SAND DUNES. SOME OF THEM ARE PRETTY HIGH AND IT´S EASY TO STUMBLE. IT´S A BEAUTIFUL SUNSET, AND I THINK BRIEFLY ON WHAT SCENE THEY SHOT HERE FOR ONE OF THE STAR WARS MOVIES. PROBABLY IT´S THE FILM TEAM THAT IS WORKING AT THE MOMENT A BIT FURTHER AWAY, SMALL SAND DUNE BUGGS GOING UP AND DOWN THE SANDY HILLS, THAT MAKES ME THINK OF MOVIE SHOOTS.

WHEN LATER THINKING ABOUT SAMPLE #7:

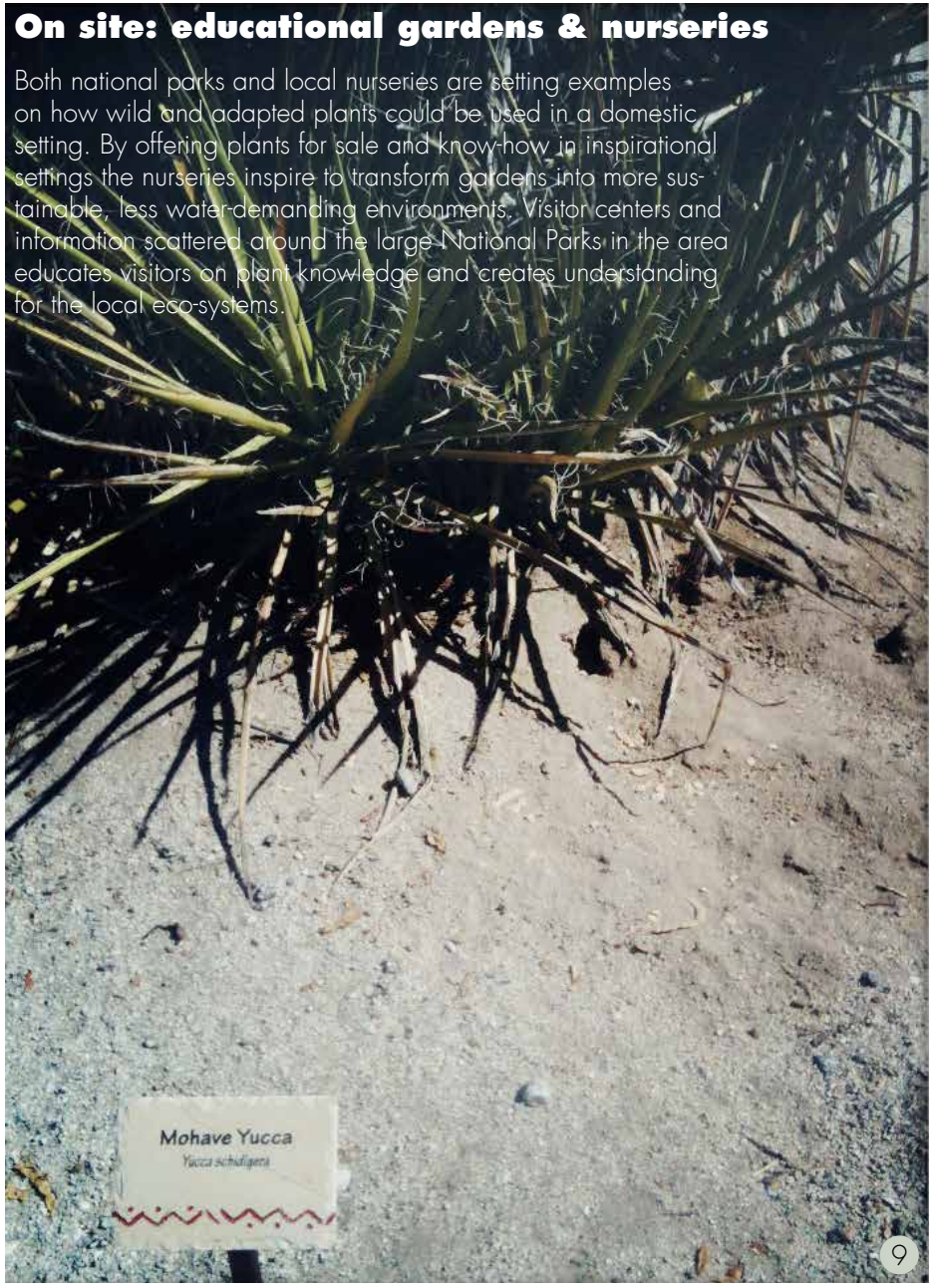
I LATER LEARN THAT THE MOTOR VEHICLE EXTREME SPORTS ARE A PRETTY BIG THING HERE, BOTH AMONG LOCALS AND TOURIST COMING TO THE AREA IN ORDER TO RIDE THE DUNES. THE VEHICLES ARE OFTEN CUSTOM MADE AND COSTS A FORTUNE. IN MOST OF THE DUNE AREA YOU CAN GO RIDING, ONLY A SMALL PART IS PROTECTED WILDERNESS.

SAND AS LANDSCAPE ELEMENT

The Algodones Sand Dunes System is one of the largest dune complexes in North America, stretching out on 8x40 miles. A small part is protected through the National Wilderness Preservation system, which serves to protect endangered species. In the Algodones the fringe-toed lizard thrives (wilderness.net).

On site: educational gardens & nurseries

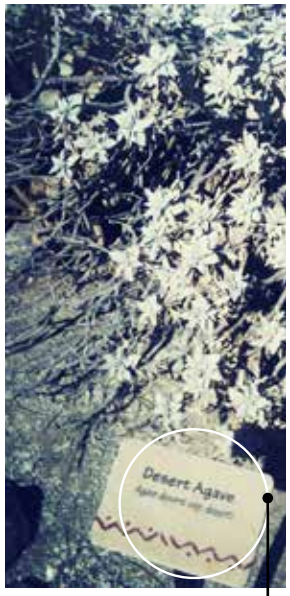
Both national parks and local nurseries are setting examples on how wild and adapted plants could be used in a domestic setting. By offering plants for sale and know-how in inspirational settings the nurseries inspire to transform gardens into more sustainable, less water-demanding environments. Visitor centers and information scattered around the large National Parks in the area educates visitors on plant knowledge and creates understanding for the local eco-systems.



9

LOCAL NURSERIES

The re-selling of adapted plants, sometime local wild species, has the opportunity to inspire and educate on dry land designs.



10

NATIONAL PARK GARDENS

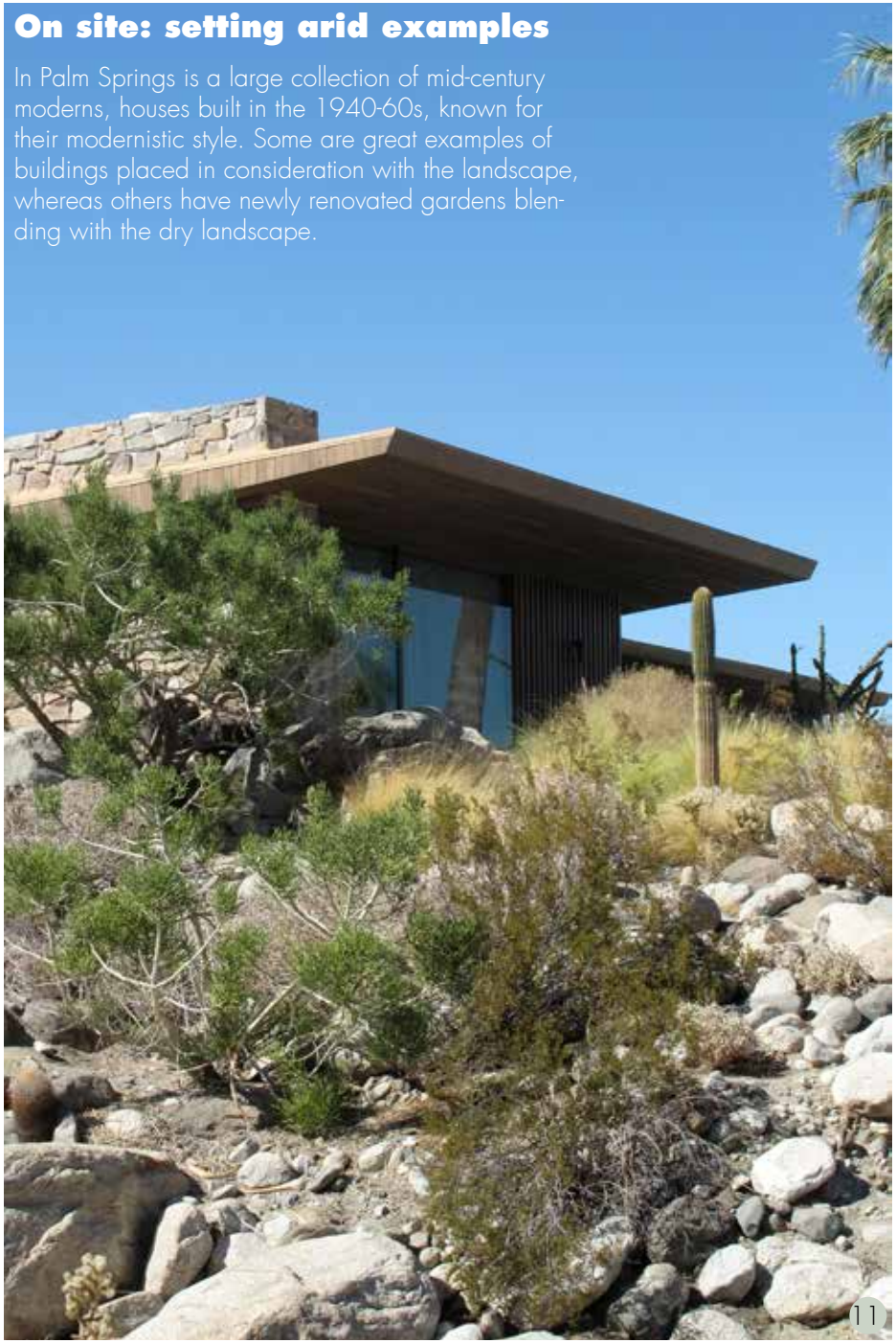
Planned dry land gardens collect the best wild, local plants in order to teach and inspire a more local adaptation of dry gardens.

PRIVATE BOTANICAL GARDENS

Local, private initiatives taking place in the area showcases great knowledge on different desert floras, and are setting examples on splendid arid gardens to be copied in the area.

On site: setting arid examples

In Palm Springs is a large collection of mid-century moderns, houses built in the 1940-60s, known for their modernistic style. Some are great examples of buildings placed in consideration with the landscape, whereas others have newly renovated gardens blending with the dry landscape.



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DRY GARDENS OUTSIDE MID-CENTURY MODERNS

Some of the mid-century modern houses have carefully planned dry gardens; stones, gravel and desert plants arranged into spaces accentuating both house and surrounding landscape. Plants as various Cactus species, Aloe Vera's - and even Smoke Trees are water-saving favourites.

THE EDRIS HOUSE

Built in 1954, from local stone and Douglas fir, the house is sometimes referred to as "Desert Modernism". Designed by the Palm Springs architect E. Stewart Williams, the house is located on a natural slope with spectacular views.

12

13

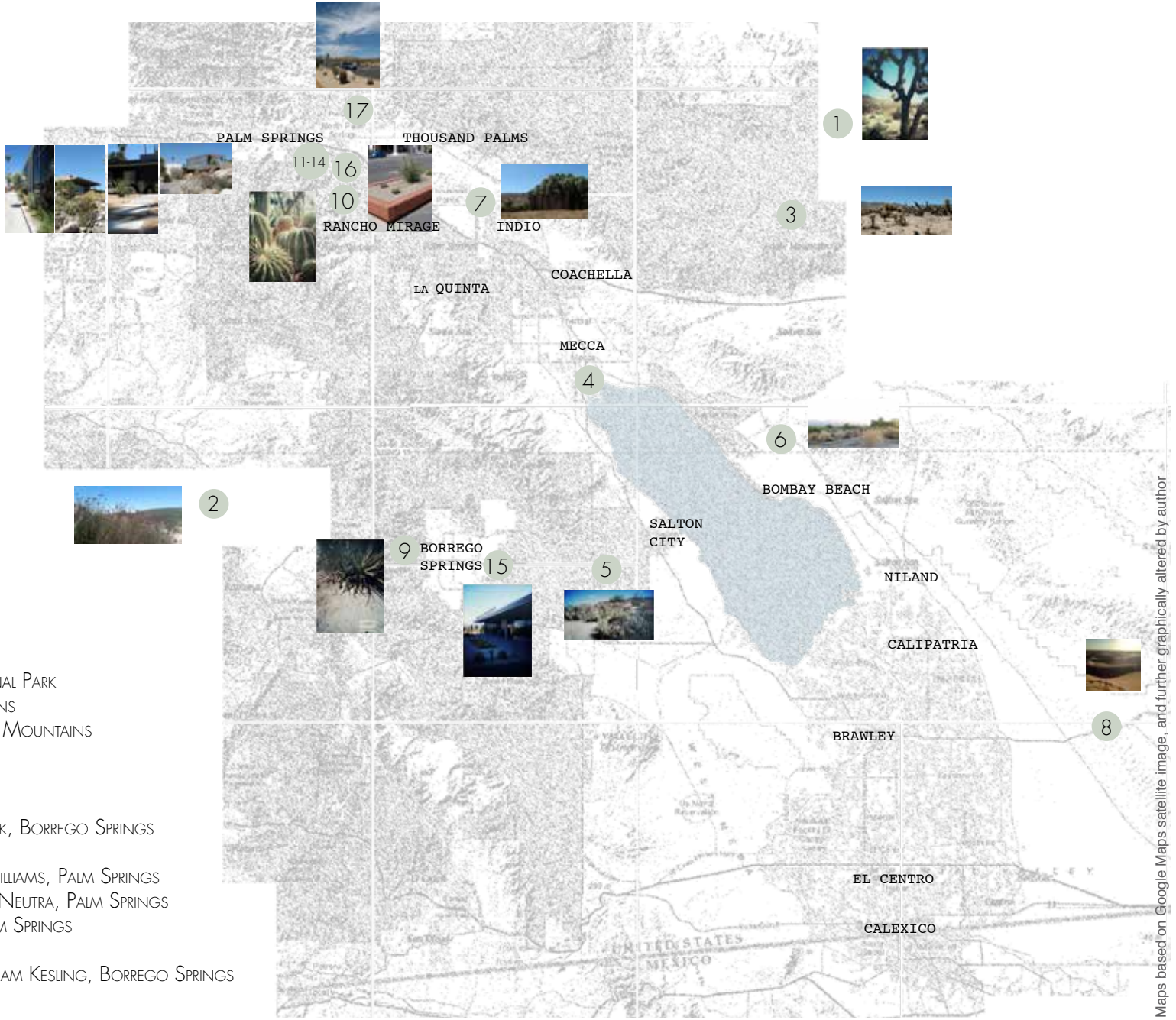
THE KAUFMANN HOUSE

The Kaufmann house is one of the iconic buildings by architect Richard Neutra, built in 1946. Inspired by early flat-roofed, mud-brick houses of Arizona and New Mexico he drew the desert vacation home in Palm Springs for the Kaufmanns, who ten years before commissioned Falling Water from Frank Lloyd Wright.

ARID STREETSCAPE DESIGN

Great examples of arid planting schemes can sometimes be seen on streetscapes such as sidewalks and roadsides, and in formal public spaces. These environments save both water and maintenance, and make inspirational examples of local, arid designs.

PHOTO INDEX: THE DESERT IS A DRY GARDEN



1. Joshua Tree National Park
2. Sand pit next to S22, close to Ranchita
3. Cholla Cactus Garden, Joshua Tree National Park
4. River termination, land of the Cahuilla Indians
5. Desert Mountain Terrain, S22, Santa Rosa Mountains
6. Desert Terrain, Chocolate Mountains
7. Thousand Palm Oasis, Indio Hills
8. The Algodones Dunes
9. Visitor Centre, Anza Borrego National Park, Borrego Springs
10. Moortens Botanical Garden, Palm Springs
11. Edris House 1954, architect E. Stewart Williams, Palm Springs
12. Kaufmann House 1946, architect Richard Neutra, Palm Springs
13. Gardens outside Mid-century Moderns, Palm Springs
14. Street planting, Palm Springs
15. Borrego Art Institute 1949, architect William Kesling, Borrego Springs
16. Street planting, Palm Springs
17. Road side Planting, Desert Hot Springs

growing food for local markets
_in search of an alternative food landscape

During the travels in the Salton Sea area I encountered numerous agricultural fields, stretching out over the desert plain. Most of them being large-scale commercial fields, I started to wonder about alternative practices. Along the way there were some evidence of an emerging, local food scene, caring about organic farming and local food culture.

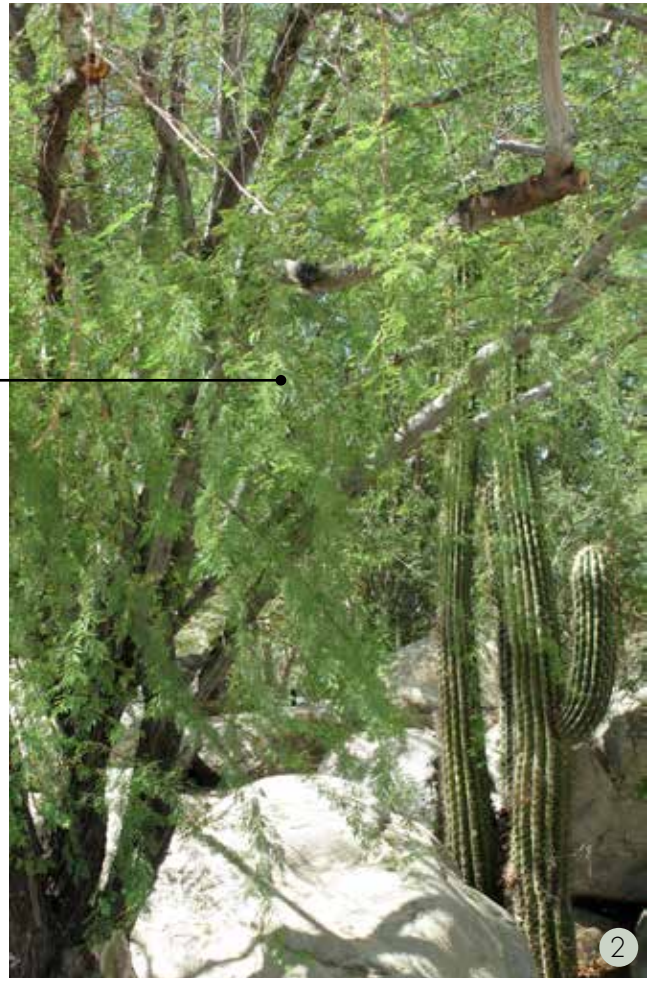
The strong Mexican influences became obvious, as we munched on countless burritos, most of them filled with the Mexican staple food of beans and rice. In small rural communities there were only one local restaurant - always a Mexican. And in the supermarkets Prickly Pear Cacti were on the shelves.

Through Mexican food, local tradition of Date Milkshakes and hip and local microbreweries I searched the valley for local food practices - revealing alternative approaches to water use and land use constructions.

Regional food culture
The influences from Mexico are strong in the area, with a large Mexican population shaping the valleys cuisine.

On site: native knowledge on dry land food

The indigenous people have inhabited the area for a long time and over time adapted to life in the arid landscape. Local knowledge of dry land food includes, among others, mesquite beans, different kinds of cacti and chollas. This food tradition is also present in Mexico, and due to the strong Mexican influence in the area some of these food traditions are still practiced.



MESQUITE BEANS

The mesquite bean has historically been a staple food for the indigenous people of the southwest deserts. The Mesquite Tree is commonly seen in the wild and the pods of beans that are harvested in the summer months from June to September are rich in protein.

2

PRICKLY PEAR CACTUS

The prickly pear cactus grows wild in the area, and both its fruit that ripe in august and the meaty body parts are used traditionally in indigenous and Mexican cuisine. The fruits are good for syrups and the cacti parts are de-needled and sliced up to be cooked.

3

CHOLLA BUDS

There are several kinds of chollas growing wild in the area. Around April the buds of the cholla can be harvested. Some of the best kinds are the buckhorn, staghorn, and pencil cholla, where the teddy bear cholla is not so tasty. It is eaten cooked, and even though not so rich in protein it contains high levels of calcium and iron.

4

5

On site: Mexican influences

The strong Mexican influences are noticeable in above all, the cuisine. Everywhere - from rural countryside to more urban areas burritos with lots of rice and beans could be ordered. Also in super-markets the regional influence is clear, with local supply for sale. This is forming a very specific food landscape, reflecting the location of the border between the USA and Mexico, as well as the presence of the large Mexican agricultural workforce.

6

THE LOCAL SUPERMARKET
Some supermarkets carry a more local range of supplies. The prickly pear cactus, common in the Mexican kitchen, is seen in supermarkets in areas with large Mexican populations.

7

CARNICERIA - TORO LOCO
Signs of large spanish-speaking populations; tomatillos and onions on offer.

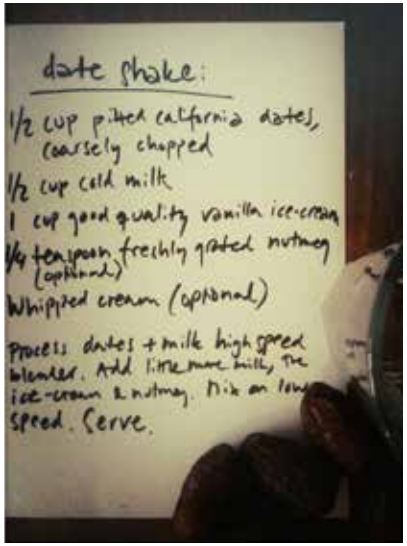
SHIELDS DATE FARM, INDIO
The Shields date farm was established in 1924 and is still in business, branded as historic date palm orchard and tourist attraction. The founders were pioneering date farmers and were breeding their own unique varieties of dates, "Blonde" and "Brunette". The 17 acre farm is maintained without any chemical fertilizers or pesticides. Connected to the farm is also a café serving date salads and shakes, and with-in the orchard is a peculiar biblical garden with statues situated.

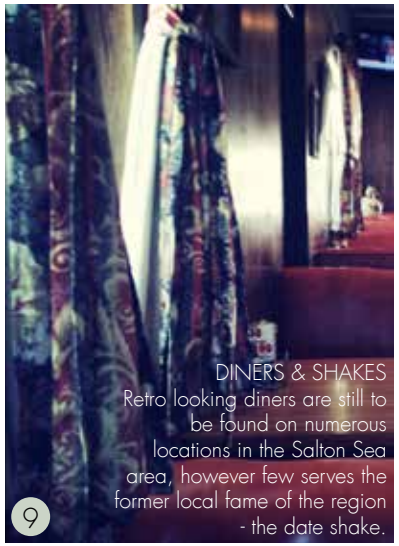
8

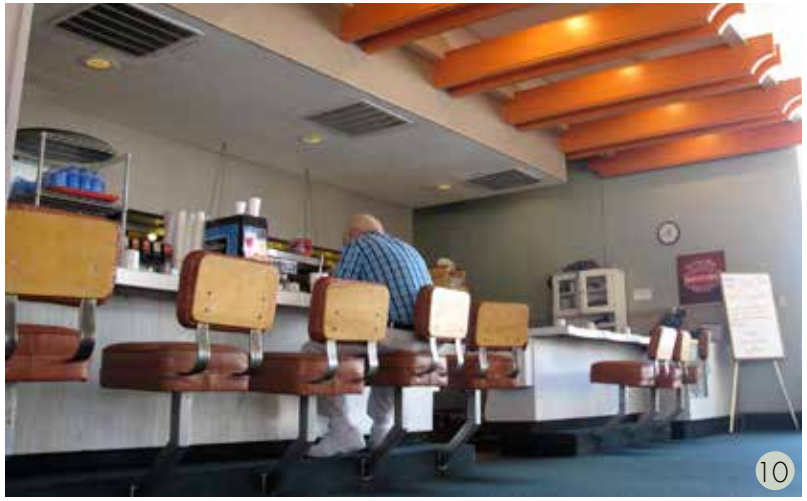
DATE VARIETYS
The Barhi date is the softest of all dates, creamy & very sweet. The Medjool is considered the star of the dates, being the biggest with soft, creamy texture and sweet flavour.

On site: milkshake with local flavor

The area boasts extensive date farms, some of them were established already in the 1920's. The climate is perfect for the dates as the air is dry and doesn't threaten to ruin the dates with moist. The Salton Sea was especially in the past famous for its local delicacy: the date milkshake. It used to be sold along the roads and in diners in the area, today it is not so commonly encountered.




DINERS & SHAKES
Retro looking diners are still to be found on numerous locations in the Salton Sea area, however few serves the former local fame of the region - the date shake.
9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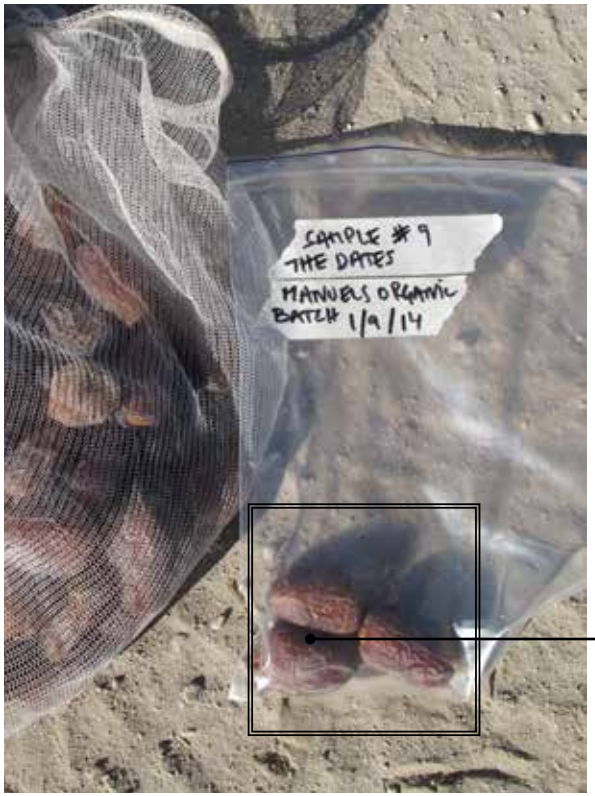


#9 MANUELS ORGANIC DATES

LONG:33.665694° N LAT: -116.12936° W
W Fillmore Street
01/09/2014

When sampling #9:

I bump into Manuel on the road outside his desert ranch, and it turns out that his date grove is just a side business. He runs the date tree ranch together with the neihgbour, who specialize on organic farming. "Dates pay good money", he says, "and the water is cheap". Manuels real business is polo horses. "You have to cover the dates otherwise the horses will eat them, they like sweets!" Around us some chickens keeps running around, hiding among the palm trees.

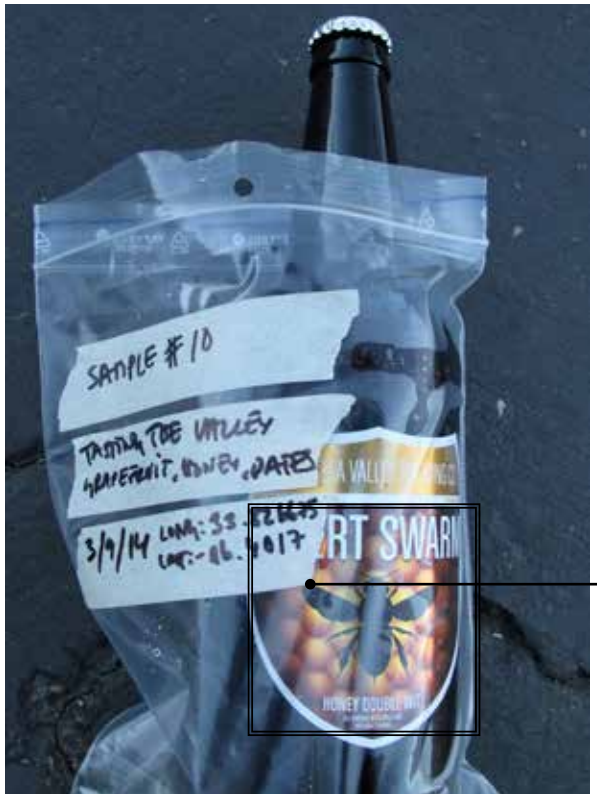
When later thinking about sample #9:

As much of the dates grown in the area, Manuel's dates are being exported to Saudi. Even though there is no chemical fertilizers used on the farm, the date palms still demands a lot of water. On the ground there's traces of water from when the field was flooded some days ago, slowly evaporating in the heat.

CHICKENS ENJOYING THE POOLS OF WATER

Flooding is a common watering technique in the area, but unfortunately not the most conservative method. When flooding the date grove the farmer makes a special order for a set amount of water to be delivered into the local water channel with-in two days. On the agreed date the farmer opens the gates to the field, and water can flood freely. The palms are soaking up water, and the redundant water evaporates.

11



#10 TASTING THE VALLEY

LONG:33.826675° N LAT: -116.4017° W
W Gunther Street
03/09/2014

When sampling #10:

The taste is sweet, but yet a bit bitter from the good quality hops and well balanced with the citrus flavour from local grapefruits. In the brewery I get to taste the fantastic, fresh honey that was delivered the same morning.

When later thinking about sample #10:

The beers are brewed from water stripped from all natural flavours, in order to make it neutral enough for real quality brews. Added to the process is honey from a guy working with wild bees, grapefruit, dates and herbs grown further down the valley. In the brewery they have invented methods of re-using water and necessary chemicals. It both saves money and resources they explain. The brewery was the first in the valley, yet just another among the myriads of craft microbreweries up the coast.

COACHELLA VALLEY BREWING COMPANY

The local microbrewery was established in the late summer of 2013 in Thousand Palms. It is a locally owned and operated brewery that has made it its mission to brew quality beer "from farm-to-table", showcasing the rich flavors of the valley.
The brewery collaborates with a range of farmers sharing their passion for sustainability, growing organic citrus, herbs, honey and spices. The spent grain leftover from the production is reused as livestock feed, and through technological improvements the brewery uses 60 % less water than industry practice when brewing.

On site: local produce re-sold

In the Salton Sea area some trembling steps on the way to join the strong food-movement of the West Coast is made. Farmers markets, local restaurants marketing local produce and the attempt to introduce food trucks in the area can all be seen as steps on the way to strengthen the local agriculture and high quality food production.

LOCAL VARIETY

Local produce such as wild bee honey goes into local crafted beers, and is on offer at venues in the area, such as hotels and restaurants - marketing the local agriculture.

13


LOCAL BREW


WILD BEE HONEY


Food trucks bring huge crowds in Cathedral City

Sammy Roth, The Desert Sun 8:33 p.m. PST November 2, 2014

f 532 19 in 2

Vegetarian falafel, ice cream cones and live music graced the plaza outside Cathedral City Hall on Sunday afternoon, and Coachella Valley residents came out in full force for the festivities.

(Photo: Crystal Chatham/The Desert Sun)

About 1,000 people turned out for the inaugural First Sunday's Gourmet Food Truck Fare, according to Chris Parman, Cathedral City's communications and events manager. For many, the event was a long-awaited chance to enjoy food on wheels.

"I've lived here since I was four years old. I grew up in Cathedral City Cove," said Daryn White, chowing down on a taco from the Classic Tacos Truck. "I've never seen a food truck in the desert."

AN EMERGING FOOD SCENE

The phenomenon of food trucks, selling good quality fast food from mobile trucks, are spreading from the west coast and is being introduced in the Salton Sea area. Cathedral City just recently hosted its first food truck event.


The Desert Sun

Food trucks driving into Cathedral Ci

Beth Roessner, The Desert Sun 12:48 p.m. PDT October 27, 2014

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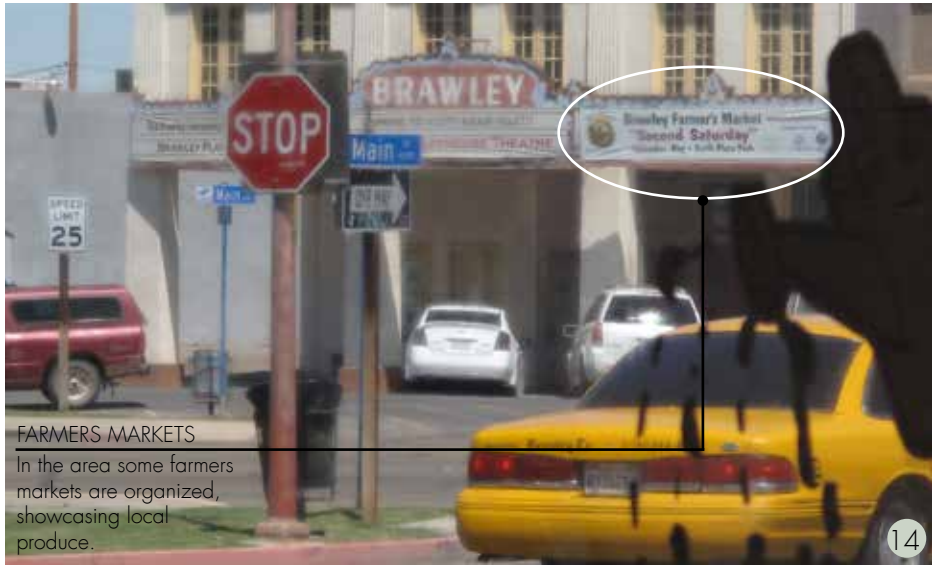
(Photo: Desert Sun file photo)

Prepare to have a light breakfast on Sunday — food trucks are rolling into Cathedral City.

Beginning Nov. 2 and continuing the first Sunday of every month will be First Sunday's Gourmet Food Truck Fare. Hosted in front of Cathedral City Hall, the event is adjacent to the city's farmers' market and will run through May. The event hours are 11 a.m. to 3 p.m.

source: the Desert Sun. 2014, oct 27 & nov 2.



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FARMERS MARKETS

In the area some farmers markets are organized, showcasing local produce.

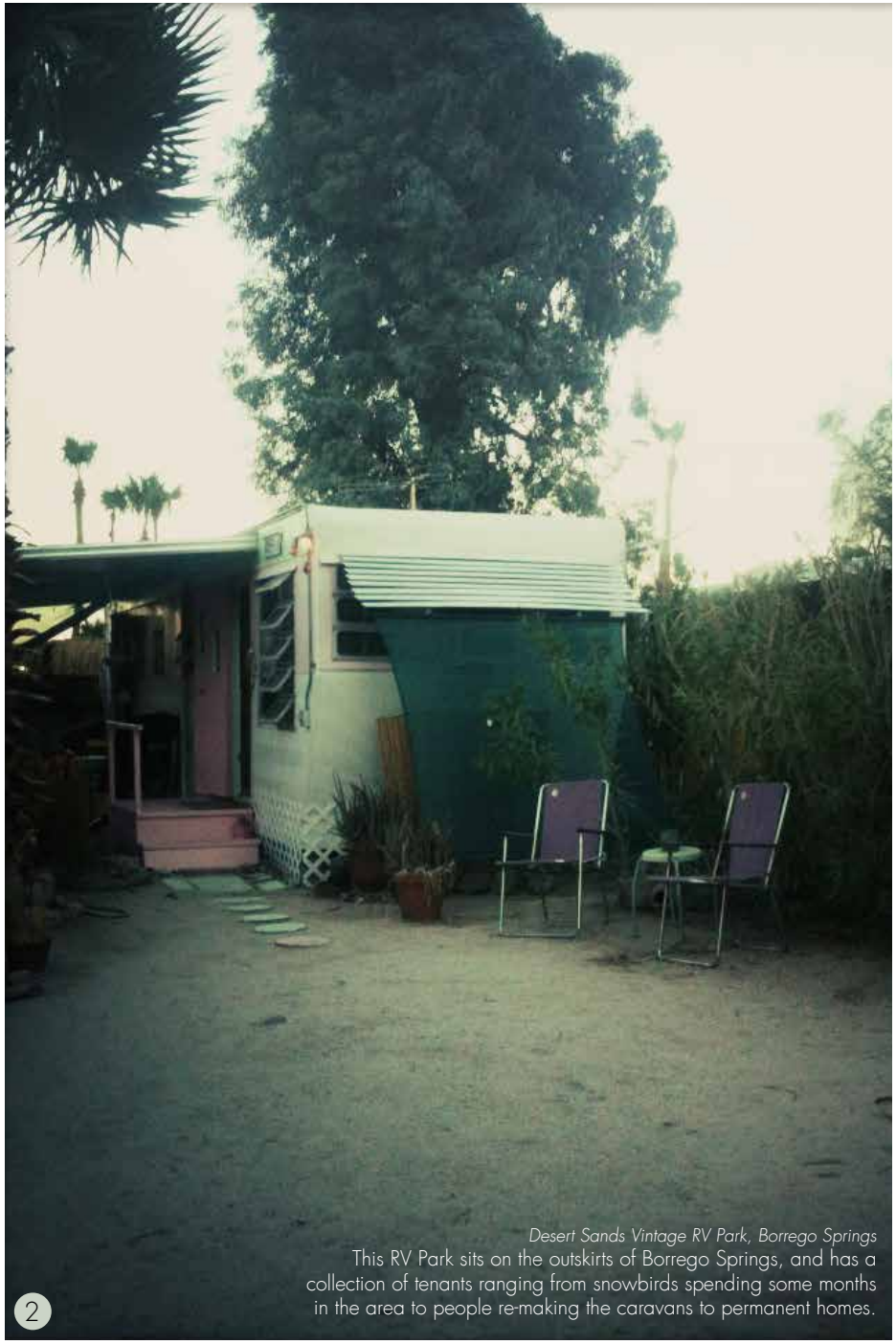
1. Talmage store, Mecca
2. Mesquite Tree, Anza Borrego National Park
3. Prickly Pear Cactus, Salton Sea State Park
4. Cholla buds, Joshua Tree National Park
5. Mexican restaurant, Coachella
6. Prickly Pear Cacti for sale, Supermarket El Centro
7. Carniceria, Mecca
8. Shields Date Farm, Indio
9. Diner, Niland
10. Old-school restaurant, Desert Hot Spring Spa Hotel
11. Manuel's date farm, Thermal
12. Cocahella Valley Brewing Company, Thousand Palms
13. ACE Hotel, Palm Springs
14. Farmers market add, Brawley

home on wheels
_in search of situated expressions

Around the Salton Sea area I was struck by the strong presence of the many mobile homes and was surprised to see the range of mobile home dwellings - not only homes for low-income dwellers, but also the more luxurious versions. Along the way I encountered parts of the diverse off-the-grid movement. At first glance the dwellings looked hostile, but on closer inspection they revealed a diverse community showcasing great personalities as well as an ambivalent approach to freedom.

The off-the-grid movement has obvious connections to what the locals themselves refers to as 'desert weirdness', people allowed to act out wishes and desires at the edge of society, further aided by the vastness of the desolate desert. I also encountered outstanding expressions of 'trash to treasure' recycling and personal artistic expressions. The strong artscene appeared to be very including and non-elitist, embracing both people and the landscape it situated itself in, often in form of outdoor installations interacting with the surrounding landscape.

The Sun Works
Off-the-grid, alternative living in Slab City outside Niland.



Desert Sands Vintage RV Park, Borrego Springs
This RV Park sits on the outskirts of Borrego Springs, and has a collection of tenants ranging from snowbirds spending some months in the area to people re-making the caravans to permanent homes.

2

On site: RV parks

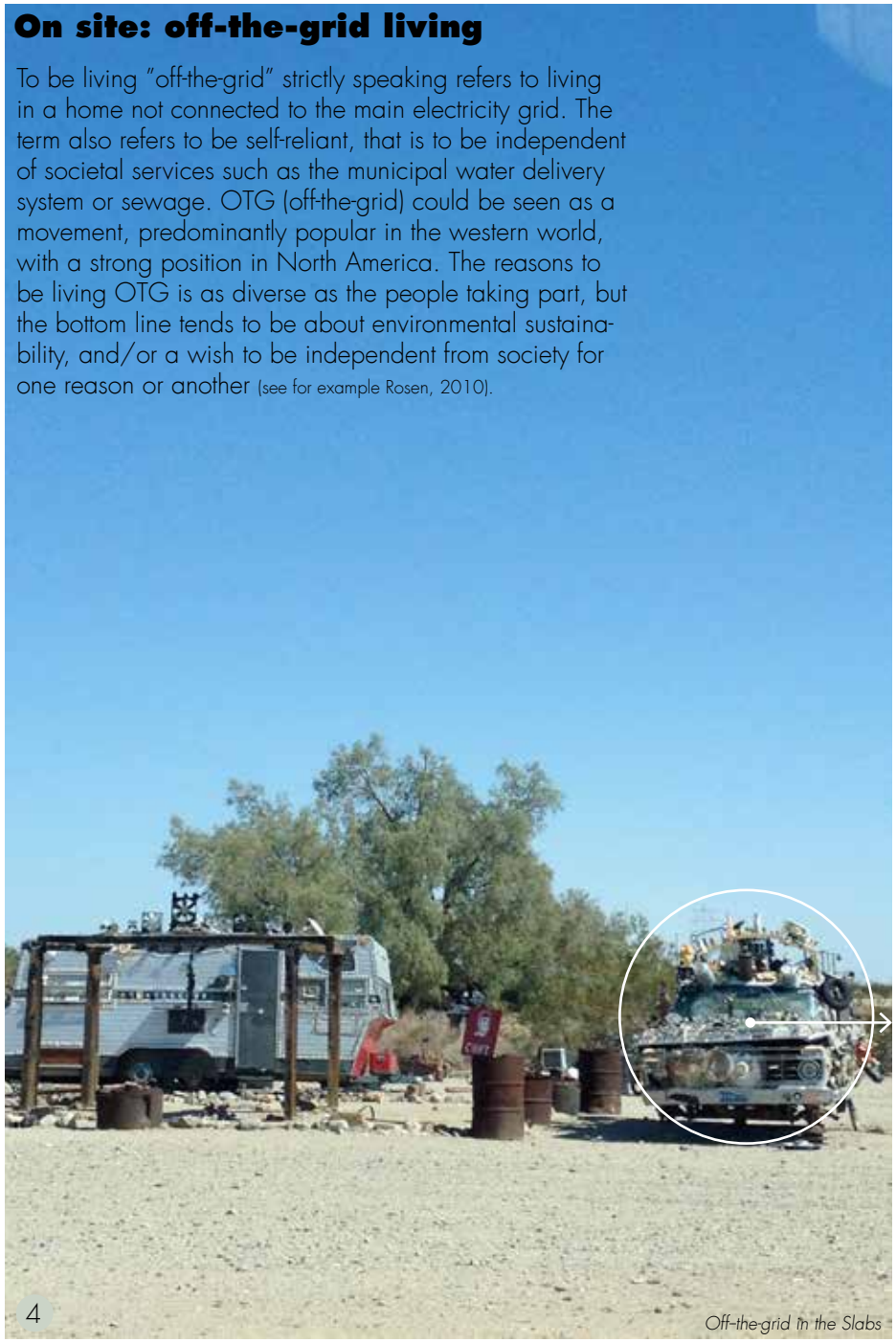
In the 1950's the phenomenon of mobile living was the latest trend. Compact and comfortable trailers was sold at low cost; enabling people to travel around the country with relative ease, with temporary parking spaces in the many RV - Recreational Vehicle - Parks springing up. Many travellers came to seek the sun and warm weather offered in the desert each fall, and eventually many of these temporary dwellers made it their permanent home. Palm Springs was considered the ultimate symbol for simplified luxury. When famous actor Bob Hope opened his RV Park Blue Skies the popularity reached new levels. Each park was a small community with barber, beauty shops and entertainment provided. One of the earliest RV parks in the area was the Ramon Trailer Park, opening already in the 1930's and still in business (Desert Sun A, 2014). Today RV Parks in the area cover a wide demographic, from luxury parks to low-income dwelling.

3

Temporary to permanent:
RV's in the Desert Sands Vintage RV Park showcasing different approaches to time; the vintage trailer ready to leave anytime, to homes with permanent character and landscaped gardens.

On site: off-the-grid living

To be living "off-the-grid" strictly speaking refers to living in a home not connected to the main electricity grid. The term also refers to be self-reliant, that is to be independent of societal services such as the municipal water delivery system or sewage. OTG (off-the-grid) could be seen as a movement, predominantly popular in the western world, with a strong position in North America. The reasons to be living OTG is as diverse as the people taking part, but the bottom line tends to be about environmental sustainability, and/or a wish to be independent from society for one reason or another (see for example Rosen, 2010).



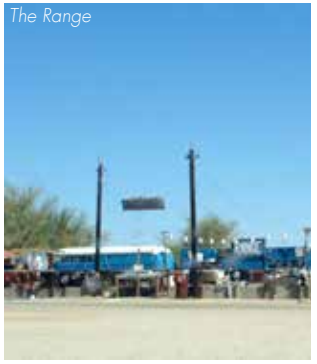
4 *Off-the-grid in the Slabs*

SLAB CITY

Outside the town of Niland, the U.S Marine used to have a training camp. After abandoning the camp, big slabs of concrete remained on the site. Over the years a loosely off-the-grid community was formed, using the old concrete slabs as convenient parking spaces (Slab City Organization, 2015). Today a mix of people forms the community of the Slabs; long-time dwellers who's been around since the start in the 60's, hippies, ex-militaries, drug addicts or others just looking for a free-zone somewhat outside the societal norms.

OFF-THE-GRID COMMUNITY

In the Slabs there are a number of community services; the bulletin board gathers information, there is a church providing gospel services, and a range of services such as barber, car repair and community library organized.



The Range

TRASH TO TREASURE DIY ART

Great examples of 'finders keepers' trash recycling can be found in the Slabs, some of them turned into imaginative Do-It-Yourself art pieces.

Slab City - Almost there! Leave your baggage here

5

BOMBAY BEACH

Bombay Beach used to be a lively recreation spot back in the Salton Sea's hayday. Now the residential numbers are down to roughly 300 people, and many of the houses or trailers are abandoned and standing as modern ruins in the area. When speaking to residents I learn that the community of Bombay Beach is diverse, and several consider their lifestyle as off-the-grid, referring more to the appreciation of autonomous life than to electricity independence, as there is electricity grid in the area.

Smile you're on camera

ARID GARDEN & CREATIVE RE-USE

A home in the OTG community embracing dry landscaping and some DIY re-use of old scrappy tyres and diverse building materials.

SKI INN ICE COOL D NKS

The electricity grid is in the air in order to protect it from earth quakes. Ski Inn is one of the local pubs still operating in the area.

CUSTOM MADE BUGS

Junior, who lives in the area, enjoys the free life on the societal edge. One of his businesses is to custom make old VW Bugs to take tourists around the Algodones Dunes.

On site: speaking about lifestyle

The two mobile home sites are a bit different from each other; the Desert Sands Vintage RV Park in Borrego Springs is primarily a community of retired dwellers, in old age seeking the sun in the desert mountains of Borrego Springs. Bombay Beach is a prior recreation destination by the shore of the Salton Sea, which has been appropriated as a semi off-the-grid dwelling.

SPEAKING WITH PATRICK & QUINN

I meet Patrick outside his trailer in Borrego Springs and while offering me a drink he tells me a bit about his life in the RV Park. A few days later I meet Quinn who is a partial resident in Bombay Beach. He proudly guides me around in the multiple parcels he has bought and currently is restoring, and later he shows me the local bar scene in Bombay Beach, introducing me to a few of his fellow off-the-grid dwellers. I am of course curious about how Sam and Quinn perceive their lifestyle choices?

P: I have some health issues, and apparently the dry mountain air is supposed to be good for me. I'll probably die here. But it's nice here. I miss my wife though, she thinks it's too hot here in the summer and goes to San Diego. She'll be back when its cooler.

- So you get a bit lonely here?

P: Well, there are still some people here over the summer. But most will be back in the fall. It's a pretty diverse bunch of people here, my neighbour is a millionaire, but that lady who rents the site across is broke, struggling with the rent for the site. Me I just stay here, my biggest expense is gas. Every time you have to drive to San Diego it is so expensive, so I try to go as little as possible so my pension will last.

Q: I just love it here. I used to come here as a kid, fishing and swimming when there was a real seaside resort here. Now I try to buy as many parcels as possible so the municipality can't evict us. That's what they're trying to do.

- Do you live here permanently?

Q: No, I'm a carpenter and have a place in Thousand Palms. But the money goes really far here - I have now bought three parcels, so I get a lot of space here. I love it here, and try to come here at least on the weekends. There are so many weird people here, it's quite nice. I renovate my trailers with building materials I get from sites I do professional construction work at. Perfectly fine stuff people just throw out because they want something else. I use it all here, saves a lot of money.

- The smelly sea does not bother you then?

Q: No, you get used to it. But I'm worried about the declining water line. You can see it change. But I mean the sea is not that polluted anymore, I go swimming there all the time, especially at night when you can see the Milky Way. It's just government propaganda, that the sea is polluted, I've talked to the rangers at the Salton Sea reserve about that.

An American story of temporality:

The story of the movable, temporary house is intertwined with the history of colonial America. J.B Jackson traces in the essay '*The Moveable Dwelling and How It Came to America*' the roots of the phenomenon of mobile homes and trailers through the layers of American dwellings.

The verb 'to dwell' means 'to linger,' 'to delay' and in terms of living space it implies that eventually we will move on (Jackson1997, p210). In historical times there have been two distinct types of house; the dwellings that at its core were independent of land - built to be rented or movable. This type of house tended to be simple in construction and cater to a working class needing to move wherever a job is to be found. The other type is the house identified as to last over generations, typically belonging to the rich and powerful. The duration connected to class is also manifested through the word 'house' as in the meaning of 'dynasty' - i.e. the house of Windsor (Jackson1997, p212).

America has a long tradition of wooden houses, at its nature a temporal material, inherited from England and other Northern European countries. In America the chief characteristics of the wooden house was both the impermanence and the mobility. The wooden houses were simple constructions easy to dissemble and to move when needed (Jackson1997, p213). Abundant land and immense forest, providing wood for buildings allowed for pioneers to change dwelling spots with relative ease, allowing for temporary houses (Jackson1997, p216). Of cultural significance to the American temporary dwelling is therefore that abandoned houses, also commonly seen in contemporary America. Jackson argues that only in the Old World, with its dream of permanence, does the deserted house or field invariably speak of human tragedy (Jackson1997, pp217-218).

The story of the classic American dwelling, commonly catering blue-collar workers, ranges from early Makeshift Slab Houses; houses without foundation typical of the colonial South, to the Log Cabin, also they are typical to frontier pioneer communities especially in West Virginia and throughout the frontier South. Both houses had simple plans with no storage space, no foundation, and no use of traditional carpentry skills. Later the Balloon Frame came to dominate the market, improved in technique but still fulfilling the quick simplicity needed (ibid).

All these building types later came to be replaced by both the mail order house, still on the agenda, and the widespread box house. The box house had no insulation, no foundation and was associated with the poorest and most transient of the population. Commonly seen in lumber towns, mining towns and in areas with plantations they were suitable when in need of a mobile dwelling type (Jackson1997, p219). Furthermore, the growth of large-scale agriculture created the need for a moveable workforce, and when the lonely farm workers in the 1920's started to be accompanied by family the need for box houses exploded (Jackson1997, p222). In the 1950's the next generation of mobile dwelling was introduced - the trailer. Cheap, convenient and above-all mobile, it shared characteristics with prior dwelling types.

The reputation of the trailer can therefore easily be analyzed from a class perspective, but as Jackson argues, it also signifies another feature of great importance in American culture. Its temporary feature also holds in promise that of freedom - of the burden of emotional connection, communal responsibilities, and enabling the freedom to move (ibid).

In the shadow of later development in the Salton Sea area and elsewhere, where the mobile homes are rendered immobile, there is an interesting contradiction between the mobile home and the effort to make it immobile - allowing it to serve as cheap housing, and one can here argue only making the connection to the early rentals even stronger.

#11 THIS USED TO BE A KITCHEN

LONG:33.918212° N LAT: -116.548809° W
64100 18TH AVENUE, S80
4/09/2014

WHEN SAMPLING #11:

I WALK OUT TOWARDS THE GIANT WINDFARM MILLS TO EXPERIENCE THE WINDY CONDITIONS. WHILE WALKING ON THE MAINTENANCE DIRT ROAD I WALK BY PILES OF THROWN AWAY TRASH. IT IS ALL SORTS OF TRASH - APPARENT REMAINS OF A KITCHEN, LEFT-OVER CAR PARTS AND OLD CANS.

WHEN LATER THINKING ABOUT SAMPLE #11:

THE SIGHT OF DISCARDED ITEMS GATHERED AT SOME SORT OF IN-OFFICIAL WASTE-COLLECTION POINTS IS NOT AN UNCOMMON SIGHT. IN ALL SEMI-DESOLATED PLACES IT CAN BE SEEN. I THINK ABOUT HOW SOME PEOPLE LIVING IN THE SLABS MAKES A LIVING OUT OF COLLECTING SCRAP METAL FROM THE ARMYS EXTENSIVE BOMB FIELDS IN THE AREA, OF COURSE BOTH DANGEROUS AND ILLEGAL, BUT SOMETIMES PROFITABLE.

DESERT DUMPING GROUNDS

In the desert all sorts of things are easily abandoned. Sometimes houses are left behind - the owner just closes the door never to come back again. Maybe that's why there is a certain desert mentality of 'finders keepers'. Collecting what others has discarded goes hand in hand with a local aesthetics of 'trash to treasure' where one persons trash can be transformed into new purposes - reworked into art pieces or simply given a new function.

On site: local DIY & art scene

In the desert there is a vibrant art scene, containing all sorts of expressions ranging from contemporary, internationally well-established artist such as Andrea Zittel, to the showcasing of more local DIY expressions. Many of the artworks reflect the desert as site, and/or the cultural expression of DIY and junked materials.

God Bless America!
DIY installation celebrating trash to treasure aesthetics.
Made of plastic cups in fence. Niland 2014

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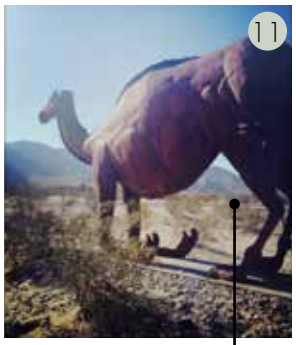

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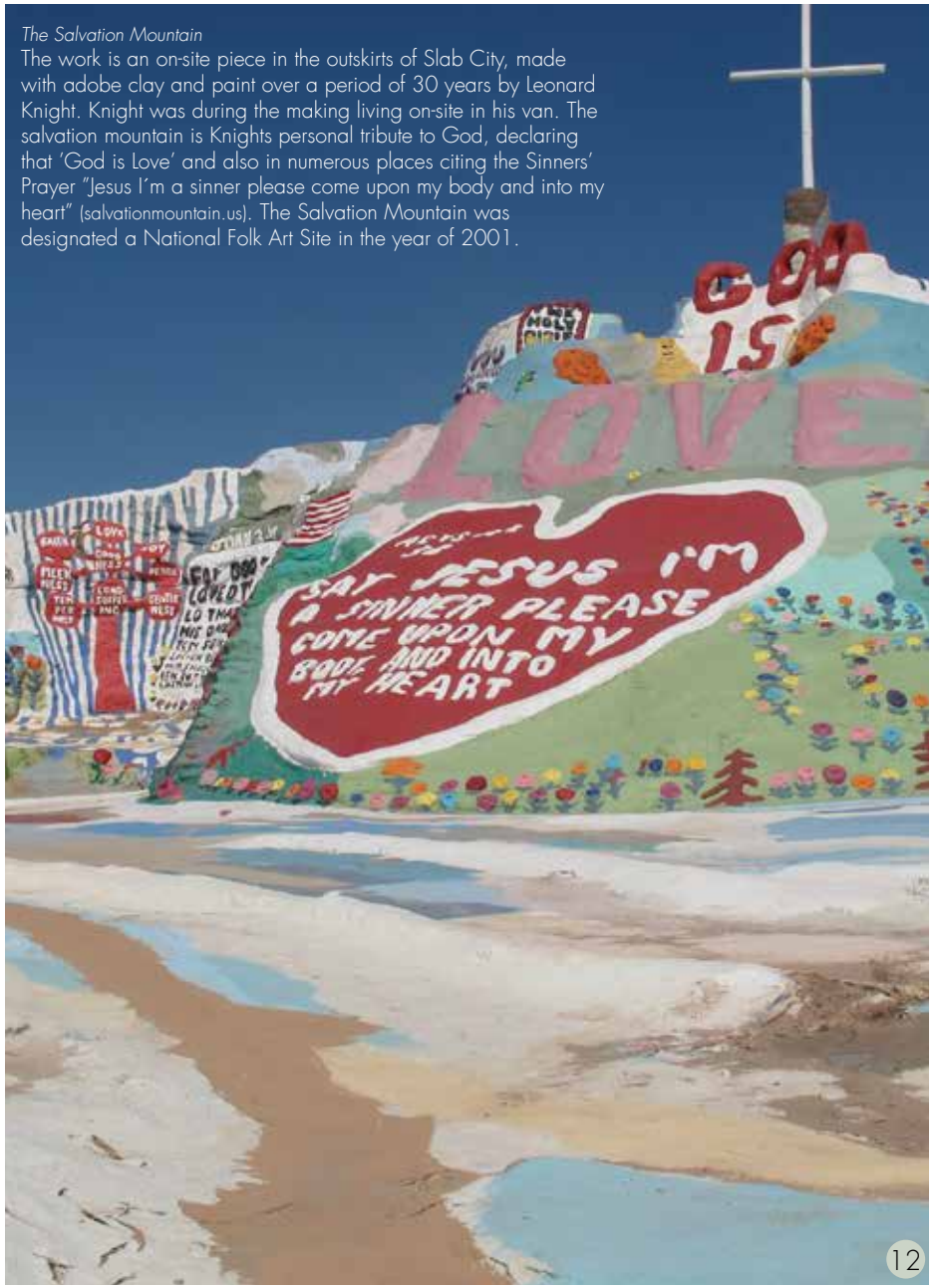
SITUATED ART

Artist Noah Purifoy moved to Joshua Tree in the late 1980's and started creating his 10-acre sculpture garden situated straight on the desert floor, with large scale installations made of junked materials (Noah Purifoy Foundation).

In 1954 George Van Tassel started building the wooden dome the Integratron. Built on an intersection of powerful geomagnetic forces the unique geometry of the building, concentrate and amplify the earth's magnetic field. Today the building host art events and sound baths (Integratron).

In 2008 the self-taught Mexican artist Ricardo Breceda was commissioned to create his signature large-scale steel sculptures to be placed on the estate of private collector Dennis Avery. The result is a sculpture park on the arid lands of Galleta Meadows Estate (Spaces, 2013).



The Salvation Mountain
The work is an on-site piece in the outskirts of Slab City, made with adobe clay and paint over a period of 30 years by Leonard Knight. Knight was during the making living on-site in his van. The salvation mountain is Knights personal tribute to God, declaring that 'God is Love' and also in numerous places citing the Sinners' Prayer "Jesus I'm a sinner please come upon my body and into my heart" (salvationmountain.us). The Salvation Mountain was designated a National Folk Art Site in the year of 2001.

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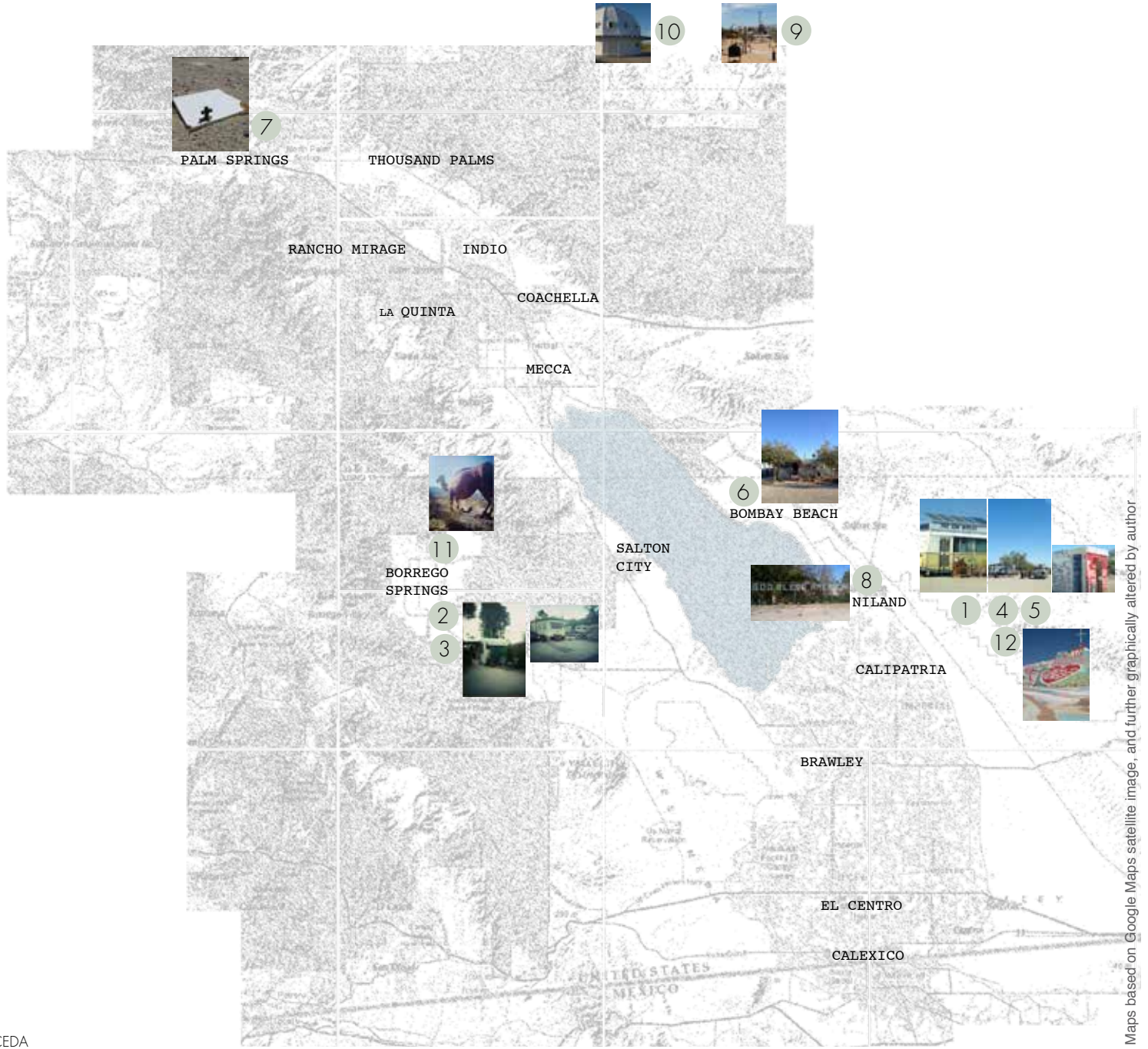
PHOTO INDEX: HOME ON WHEELS



1. The Sun Works, Slab City
2. Desert Sands Vinatge RV PArk, Borrego Springs
3. Desert Sands Vinatge RV PArk, Borrego Springs
4. Slab City
5. Slab City
6. Bombay Beach
7. Windmill Park, North Palm Springs
8. 'God Bless America' DIY craft, Niland
9. The Noah Purifoy sculpture park, Joshua Tree
10. The Integratron, Landers
11. Galleta Meadows, sculpture park by Ricardo Breceda
12. The Salvation Mountain, artwork by Leonard Knight, Slab City

Chapter 4:

Invitation for Transformation

The thematic findings from fieldwork presented in Chapter 2 and 3 provided me with opposing poles representing two very different attitudes towards the landscape and the condition for life in arid lands. The Act of Land Colonization represented an engineered water system with maximum human benefit in mind, encounters with an industrial scaled type of farming, and the prevailing urban aesthetic of lush living manifested in gated communities, luxury resorts, golf courses, public space and in private homes. In The Act of Challenging Business As Usual another existing reality was examined. Here arid gardens with inspiration from the surrounding desert landscape turned up. Educational gardens and local nurseries leads the way in order to adapt the aesthetic to local conditions. In opposition to the industrial agriculture business I found some trembling steps in search for a local alternative. In Home on Wheels a local tradition of mobile homes is presented, sometimes expressing desire for an alternative life style and so called off-the-grid living. This alternative life style also embraces a sort of "trash to treasure" aesthetic that appears to be a feature of desert living.

The seeds of questioning discovered on the deviant transect provided me with what I found to be three methodological translations. The translations are a way of moving from a specific finding into a more conceptual thinking when identifying what kind of existing attitudes are able to become driving forces towards a more sustainable use of water.

The three emerging translations are:

Welcoming the Desert Landscape Into the Urban Construction

Acknowledging Local Food Systems

Appreciating Alternative Ways of Living in the Desert

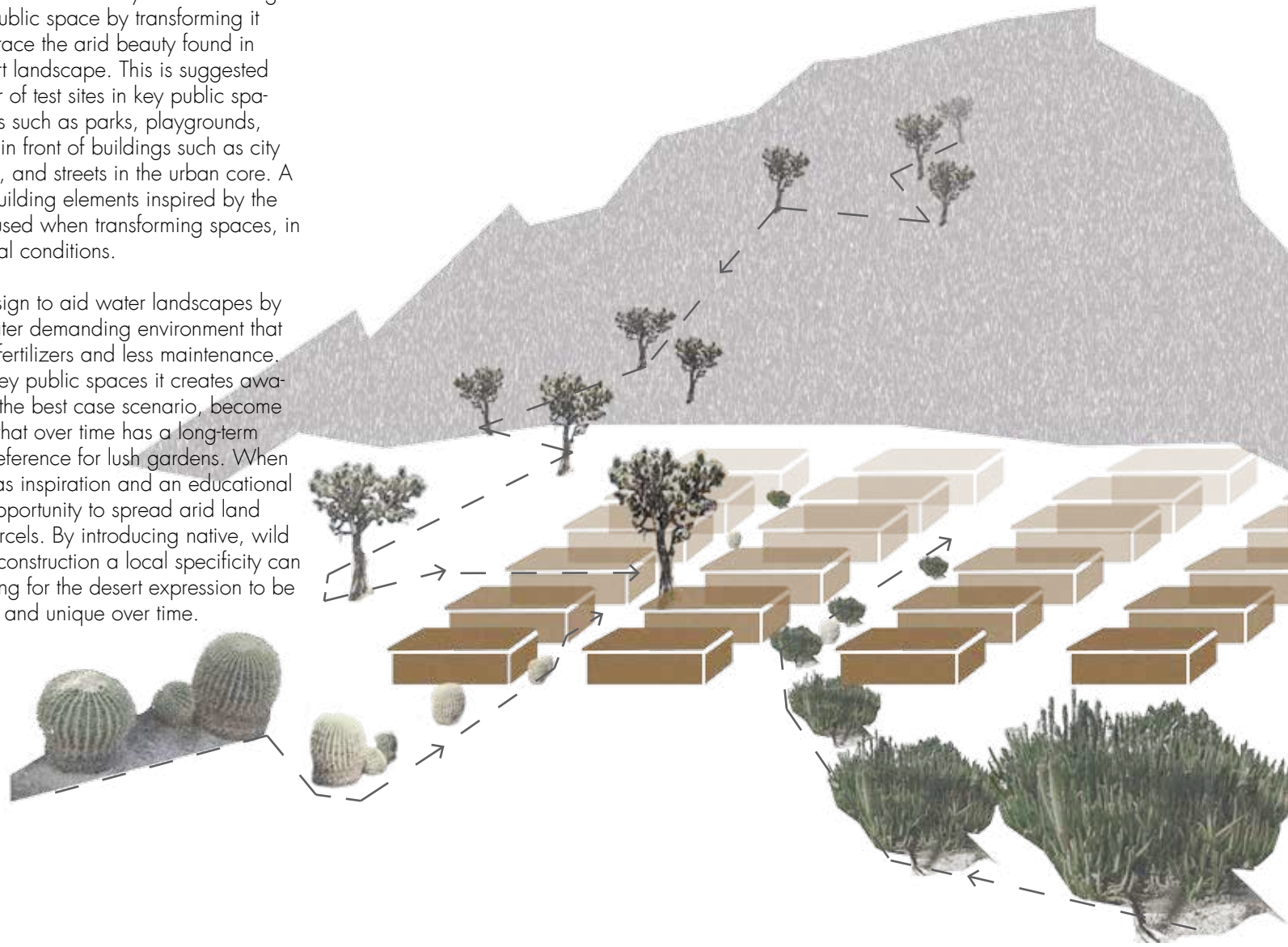
As example of how these translations could be useful, I put them to test in imagined physical interventions. These design proposals are imagined at concrete sites in the Salton Sea area, and should be seen as examples of spatial materialization rather than determined plans. The choices of transformation sites are of a sketchy character and guided by experiences and findings during fieldwork and serve as examples of where changes possibly could take place.

The design proposal is constituted of four parts, three of them working with the physical concept going hand in hand with the translations previously mentioned. The first part, Designing arid beauty – transforming local aesthetics in public space is the physical counterpart for the wish to welcome the desert landscape into the urban construction. Cultivating local flavour – introducing small-scale food gardens is a way of trying to acknowledge a local food system. Part three, Conceptualizing dwelling 2.0, is a response to the concept of appreciating alternative ways of living in the desert. The last part of the design proposal, Conceiving a network of test sites – allowing for a process in flux, touches upon organizational matters. Here the aim is to suggest how to combine the different thematic designs into a whole, and to reinforce the importance of allowing a process from the ground up and in ongoing flux.

designing arid beauty
_transforming local aesthetics in public space

This design proposal focuses on ways of introducing a local aesthetic in public space by transforming it into spaces that embrace the arid beauty found in the surrounding desert landscape. This is suggested by creating a number of test sites in key public spaces with different uses such as parks, playgrounds, representative space in front of buildings such as city halls and post offices, and streets in the urban core. A certain typology of building elements inspired by the arid lands could be used when transforming spaces, in order to adapt to local conditions.

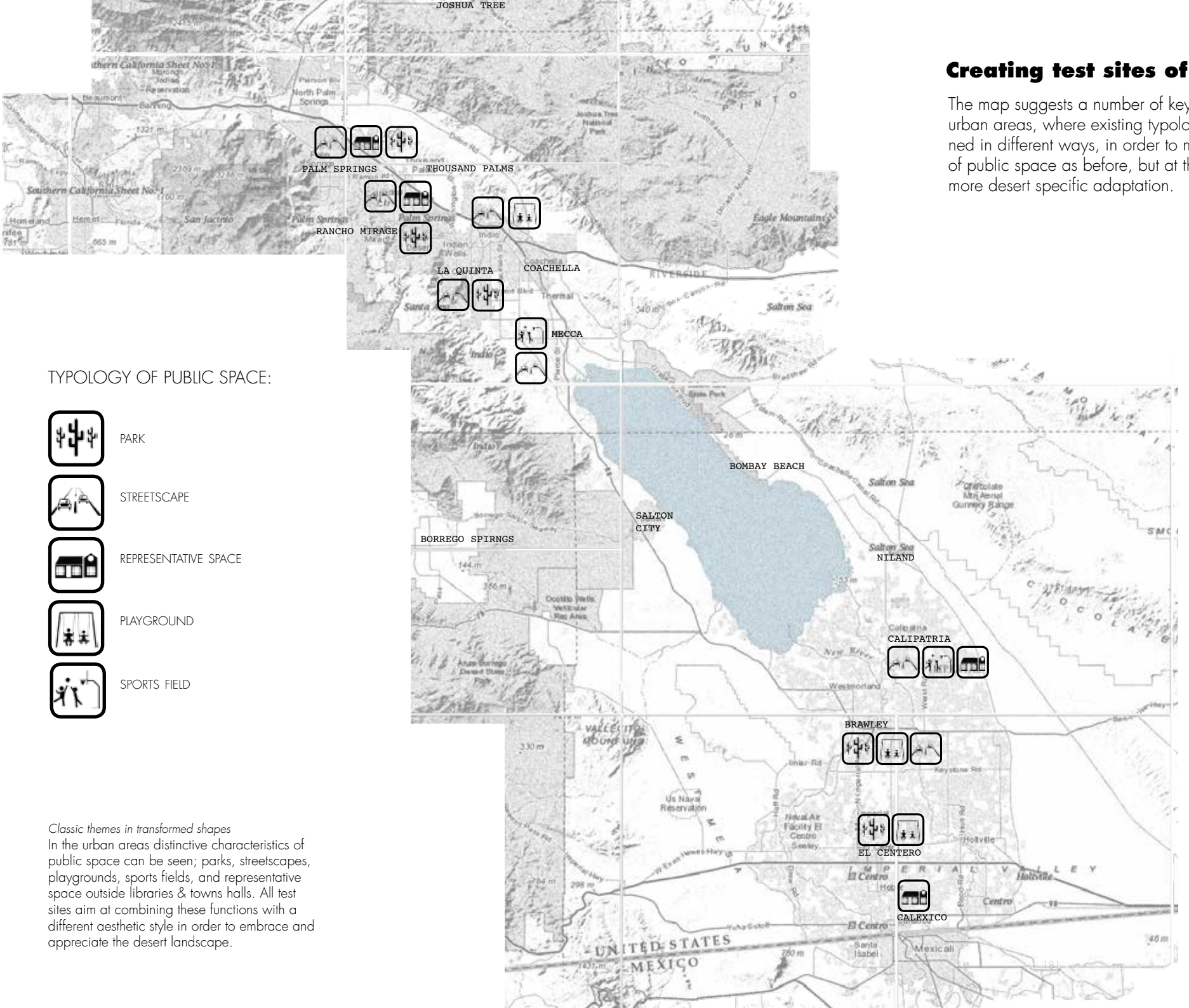
The aim is for the design to aid water landscapes by introducing a less water demanding environment that also will require less fertilizers and less maintenance. When transforming key public spaces it creates awareness and could, in the best case scenario, become an inspirational fuse that over time has a long-term effect on the local preference for lush gardens. When public space serves as inspiration and an educational platform, it has the opportunity to spread arid land designs to private parcels. By introducing native, wild species in the urban construction a local specificity can be reinforced, allowing for the desert expression to be more and more local and unique over time.



Welcoming the Desert Landscape Into the Urban Construction
The conceptual translation aims at reinforcing the local specificity of the arid landscape also in urban spaces.

Creating test sites of public space:

The map suggests a number of key transformation sites in urban areas, where existing typologies could be designed in different ways, in order to meet the same needs of public space as before, but at the same time inspire a more desert specific adaptation.



TYPOLOGY OF PUBLIC SPACE:

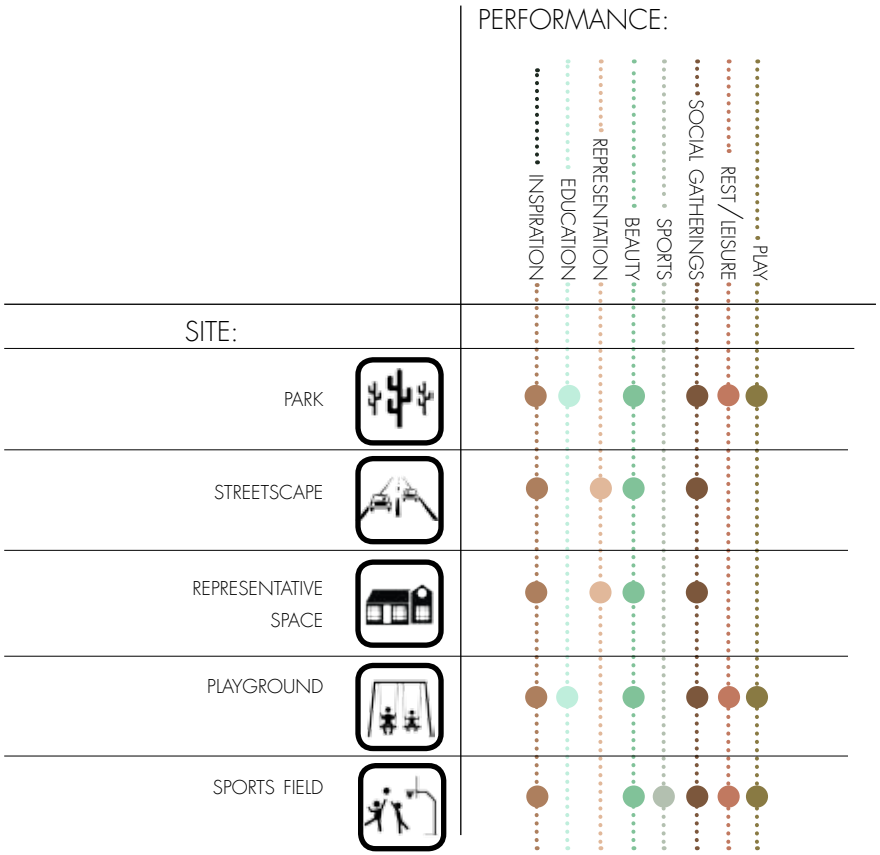
- PARK
- STREETSCAPE
- REPRESENTATIVE SPACE
- PLAYGROUND
- SPORTS FIELD

Classic themes in transformed shapes
In the urban areas distinctive characteristics of public space can be seen; parks, streetscapes, playgrounds, sports fields, and representative space outside libraries & towns halls. All test sites aim at combining these functions with a different aesthetic style in order to embrace and appreciate the desert landscape.

Maps based on Google Maps satellite image, and further graphically altered by author

Performing space:

By using local materials with inspiration from the surrounding arid landscape, uses such as; play, leisure, sports and social gathering points could display a more site specific arid beauty while still being functional spaces. Public space could then serve as inspiration by embracing local, wild beauty that demands less water.

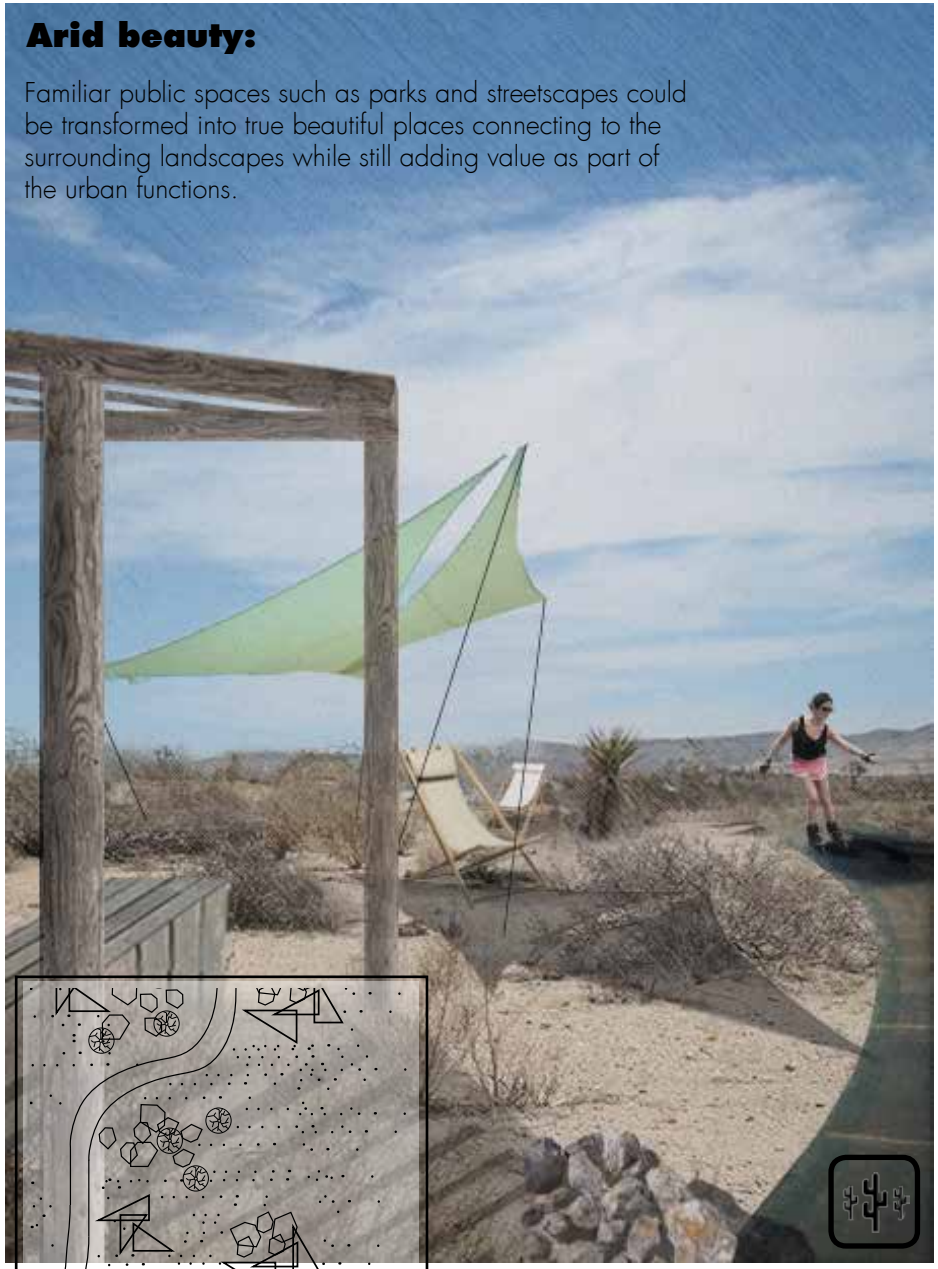


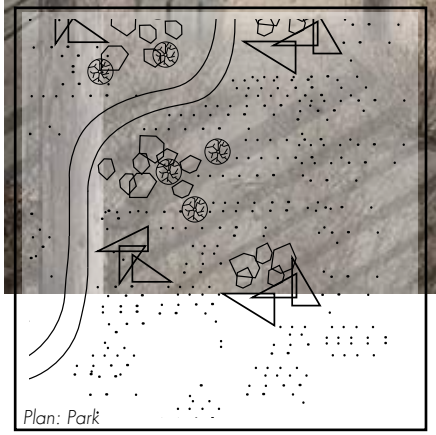
Site & Function
Public spaces need to cover a variety of tasks, depending on location and main functions.

Material tool-kit for urban space
Building materials, drawing on inspiration from the surrounding geographical and cultural landscape.

Arid beauty:

Familiar public spaces such as parks and streetscapes could be transformed into true beautiful places connecting to the surrounding landscapes while still adding value as part of the urban functions.



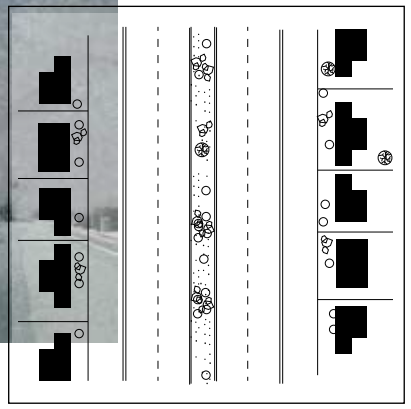


Plan: Park

Arid park
Green lawns could easily be replaced by local sand and gravel, forming dry desert beaches. Urban features as asphalt pathways and sunshades adds functions and make the parks easy accessible.

Representative landscape
Beautiful formal spaces could be designed with the help of native plants and rocks, which would stand in clear contrast to formal elements such as statues.

Dry streetscape
The dry streetscape encountered around the rural desert streets could serve as inspiration also for the urban construction, weaving through the grid of streets and anchoring the city in the landscape.



Plan: Streetscape
Planting with rocks & arid plants instead of palms along the streets of the cities.

Creative playground
Self-build play sculptures inspired by the areas art scene and strong presence of DIY-craft creates dry oasis for kids.

cultivating local flavour

_introducig small-scale food gardens

Cultivating local flavour as a design action recognizes three types of spaces as the new places for introducing local, small scale farming in the area. By identifying the Neighbourhood block, the School kitchen garden and the Field co-op garden, untraditional managing in form of techniques, choices of crops and organization invites new groups of citizens to take on an active role in the local food production. In the design proposal a number of test sites in the area are being identified, and a number of food related events are further suggested in order to help create a local food scene. The design also connects the Salton Sea area with other regional food producing areas in order to exchange experience on arid land farming and, as a spin-off, reinforce local business by putting the area on the food tourism map.

Food production is a water intense land use. By introducing different forms of agriculture the hope is to create awareness and a renowned respect for the local resources being used. Small-scale farming also has the capacity to improve on irrigation techniques and use less or no pesticides, through the means of management. The aim is also to inspire a responsible, long-term farming culture. This has the opportunity to prepare the Salton Sea area for challenges to come in terms of reduced water supplies. A society built upon food in small-scale production could possibly be saved by local food supply in times of negative agricultural development in the area.

Acknowledging Local Food Systems
- is about creating a local food supply system, to see if it is possible to grow food in a slightly different way & to put food on the agenda in the area.

A local network of food:

New forms of agricultural and gardening have the opportunity to put food and its production conditions on the agenda. The map suggests a number of sites for these types of new garden collaborations to take place, and these could potentially, together with new retail space, be the cornerstones in the making of a local food system.

TYPOLOGY OF FOOD PRODUCTION SITES:

CO-OP GARDEN FARMING

SCHOOL KITCHEN GARDEN

NEIGHBOURHOOD BLOCK GARDEN

TYPOLOGY OF RETAIL SPACE:

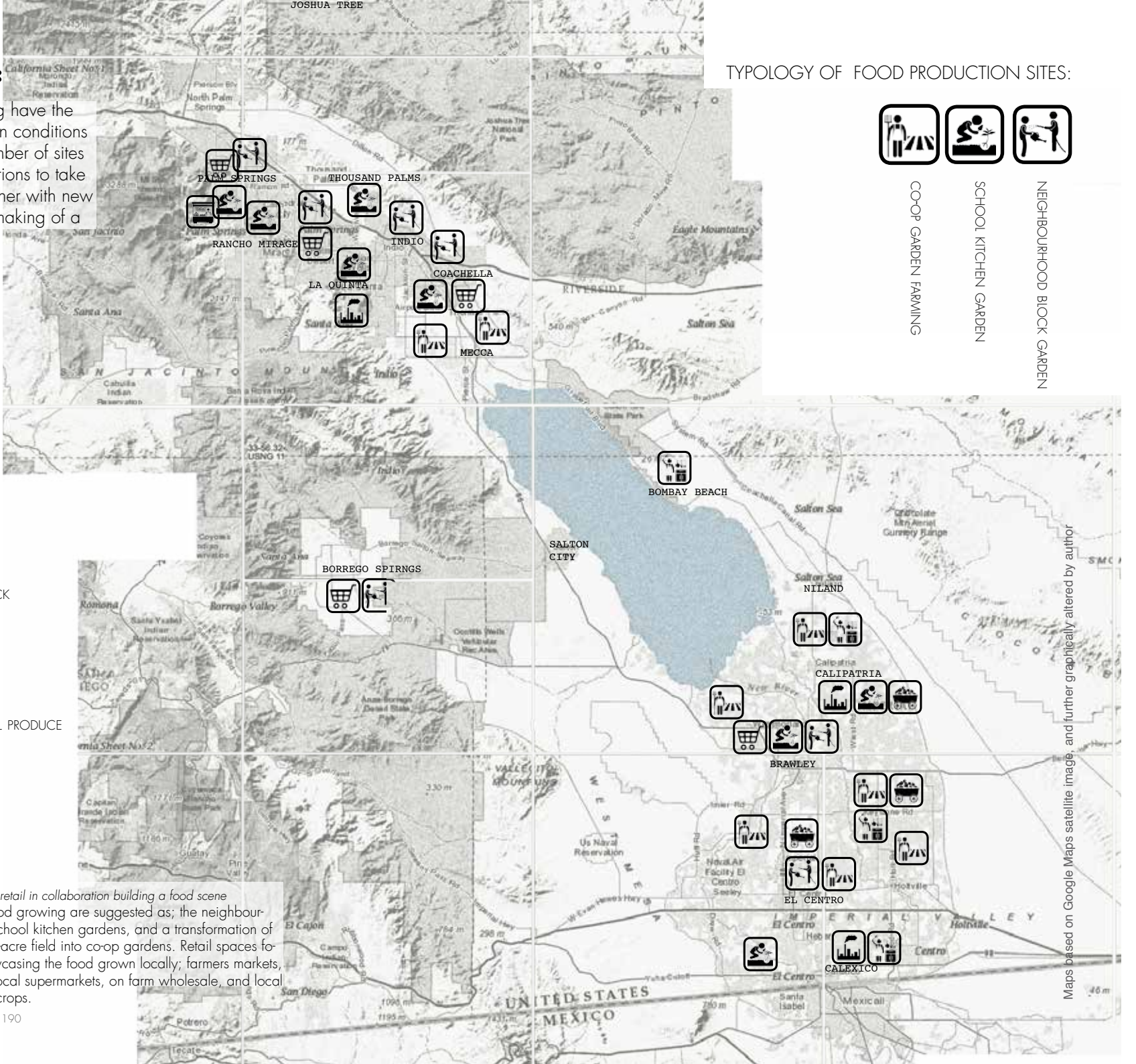
FARMERS MARKET

LOCAL DINER/LOCAL FOOD TRUCK

LOCAL PRODUCER

LOCAL SUPERMARKET WITH LOCAL PRODUCE

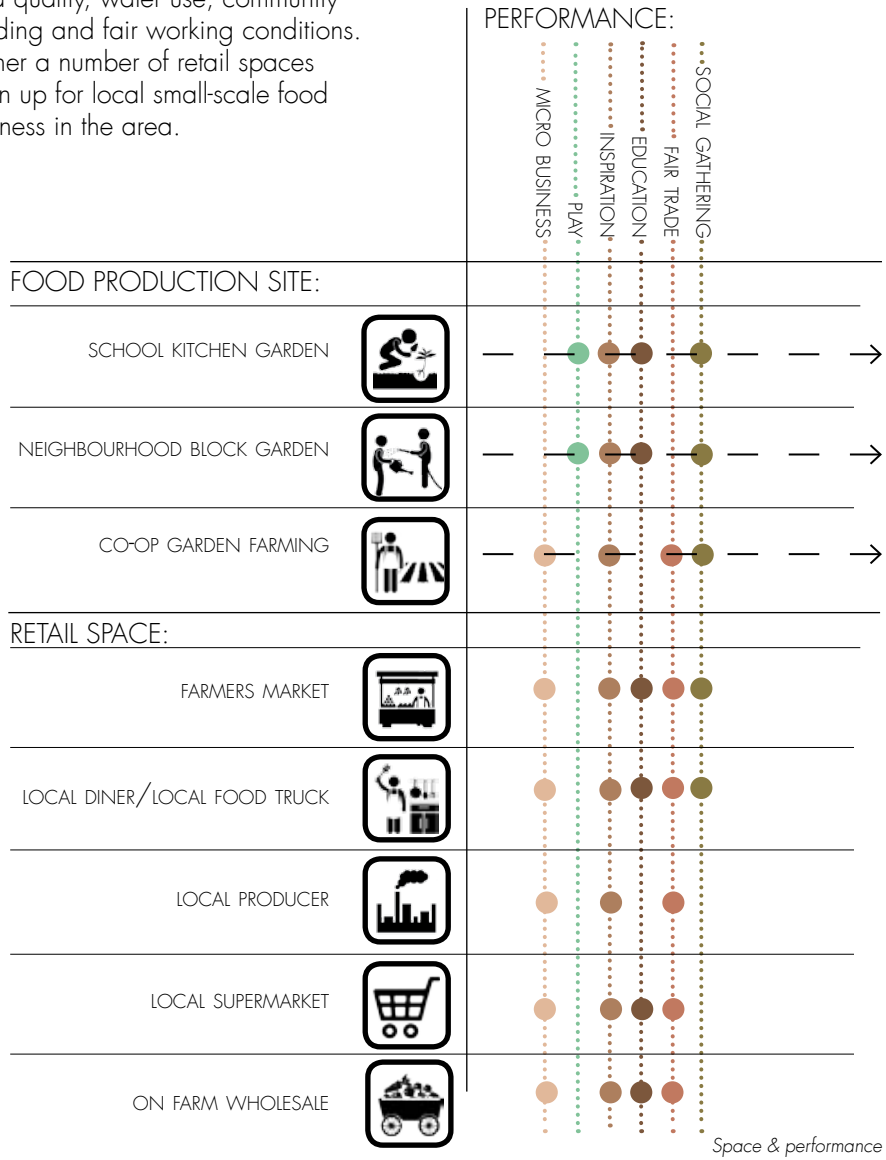
ON FARM WHOLESALE



Gardening and retail in collaboration building a food scene
The sites of food growing are suggested as; the neighbourhood block, school kitchen gardens, and a transformation of the classic 15-acre field into co-op gardens. Retail spaces focuses on showcasing the food grown locally; farmers markets, local diners, local supermarkets, on farm wholesale, and local refinement of crops.

Performing space:

Three types of food production sites introduced in the area offer a variety of local food supply, focusing on food quality, water use, community building and fair working conditions. Further a number of retail spaces open up for local small-scale food business in the area.



Space & performance
Production sites and retail space together put food on the agenda, allowing for other incitement benefits but pure financial.

Users organizing communities:

The examples of food production sites enables transformations to be made by those affected by its consequences; kids & teachers setting up educational kitchen gardens; neighbours forming community vegetable gardens transforming lawns to food, and agricultural workers seizing power forming food co-operations.

KIDS GARDENING

NEIGHBOURS GROWING FOOD

WORKERS RUNNING CO-OPS

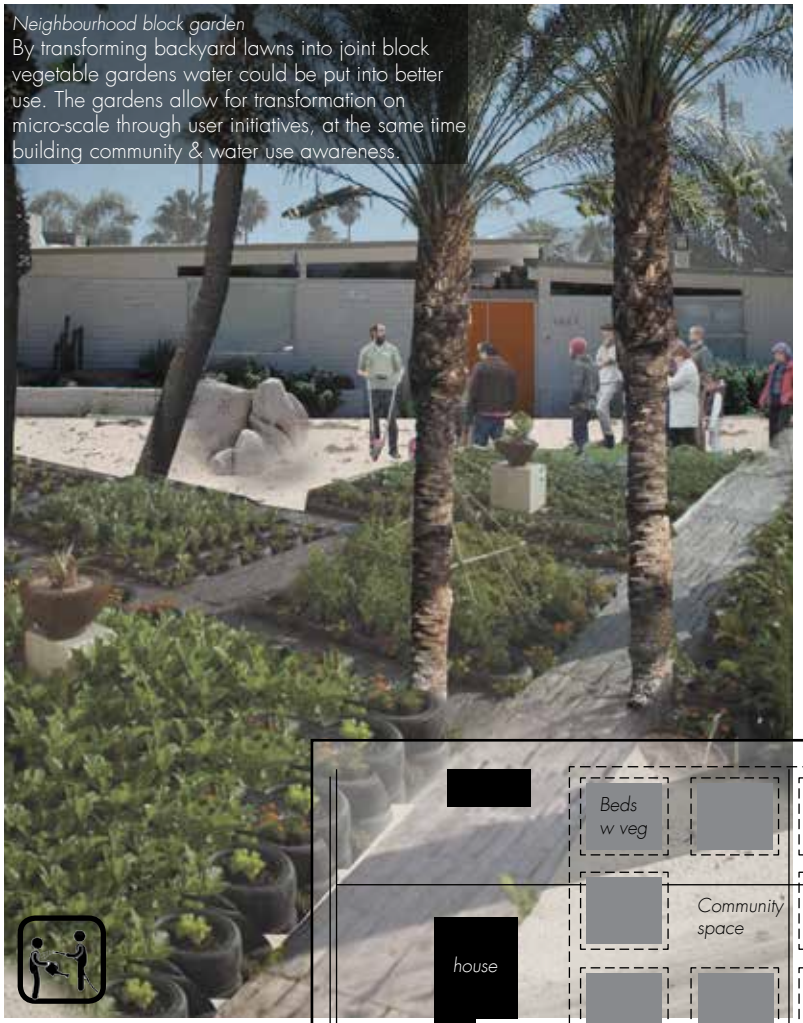
Transforming food production
Production sites and retail space together forms a new type of food market; enabling for small-scale and more endurable farming.

Cultivated ground:

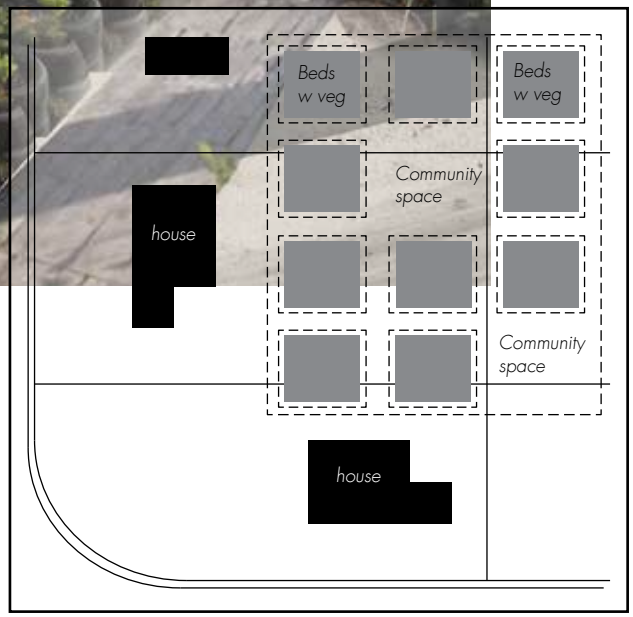
Test sites of food production open up for new types of farming, and a transformed attitude to food quality and use of water. New structures of agricultural fields, residential, and semi-public spaces changing from lawns to food gardens together forms the basis for transformed food production terms.

Plan: School kitchen garden

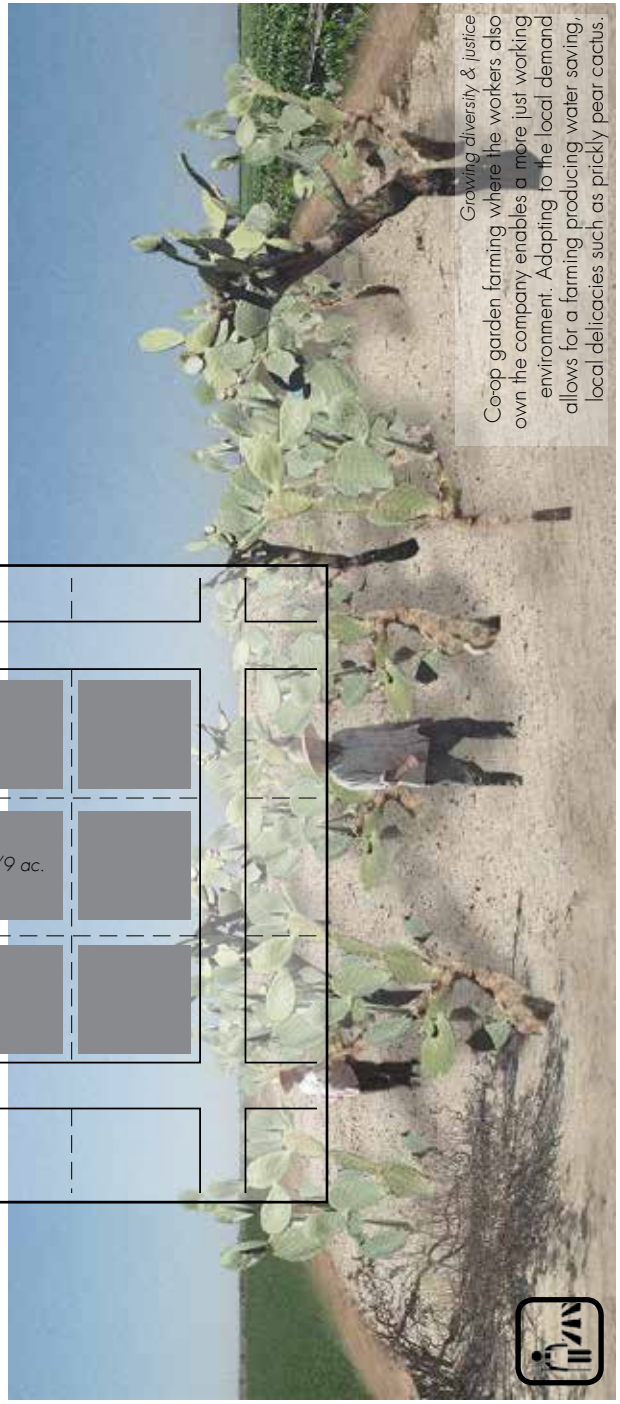
School kitchen garden
Transforming asphalt areas and lawns in school yards into vegetable beds serve as educational platforms for kids, teaching them about food quality, resources and water use in a hands-on manner.

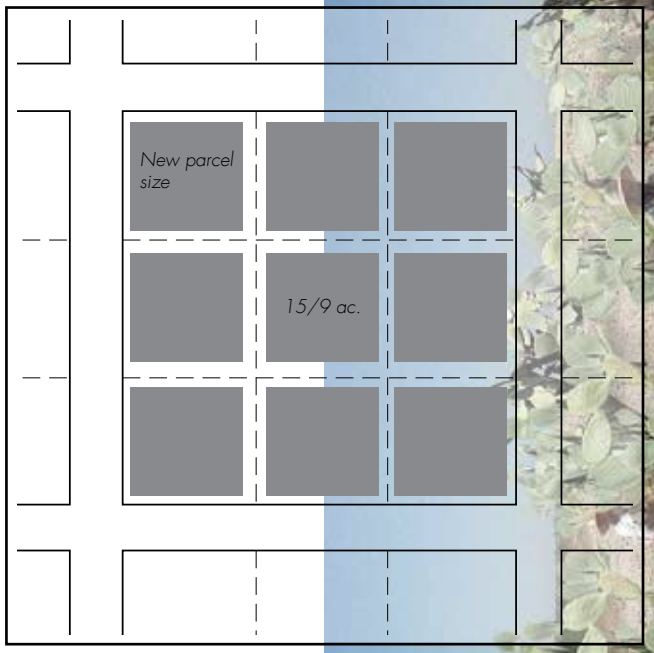


Neighbourhood block garden
By transforming backyard lawns into joint block vegetable gardens water could be put into better use. The gardens allow for transformation on micro-scale through user initiatives, at the same time building community & water use awareness.



Plan: Neighbourhood block garden
The plan allows neighbours to combine their back yards into one big block garden space for community gardening. Grey areas indicates beds for vegetables.

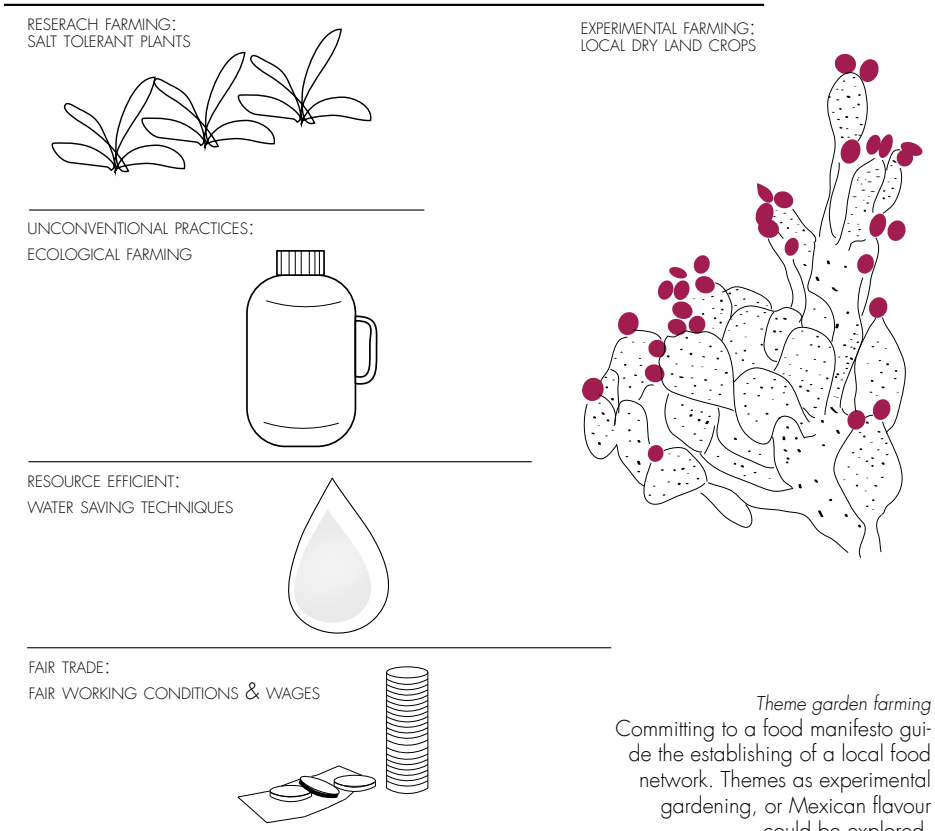




Plan: Co-op garden farming
Parcellation of the standard 15-acre field creates a wider variety of growing crops,

Food manifesto:

In order for the local test sites to serve as a relief for the water landscape and to have a maximum impact, a food manifesto would help guide the establishing of the diverse food production and retail spaces. By committing to a food manifesto experimental garden farming could lead the development into more sustainable practices; using less water, finding new creative farming ways, and work for a more just system where workers and land are not exploited.



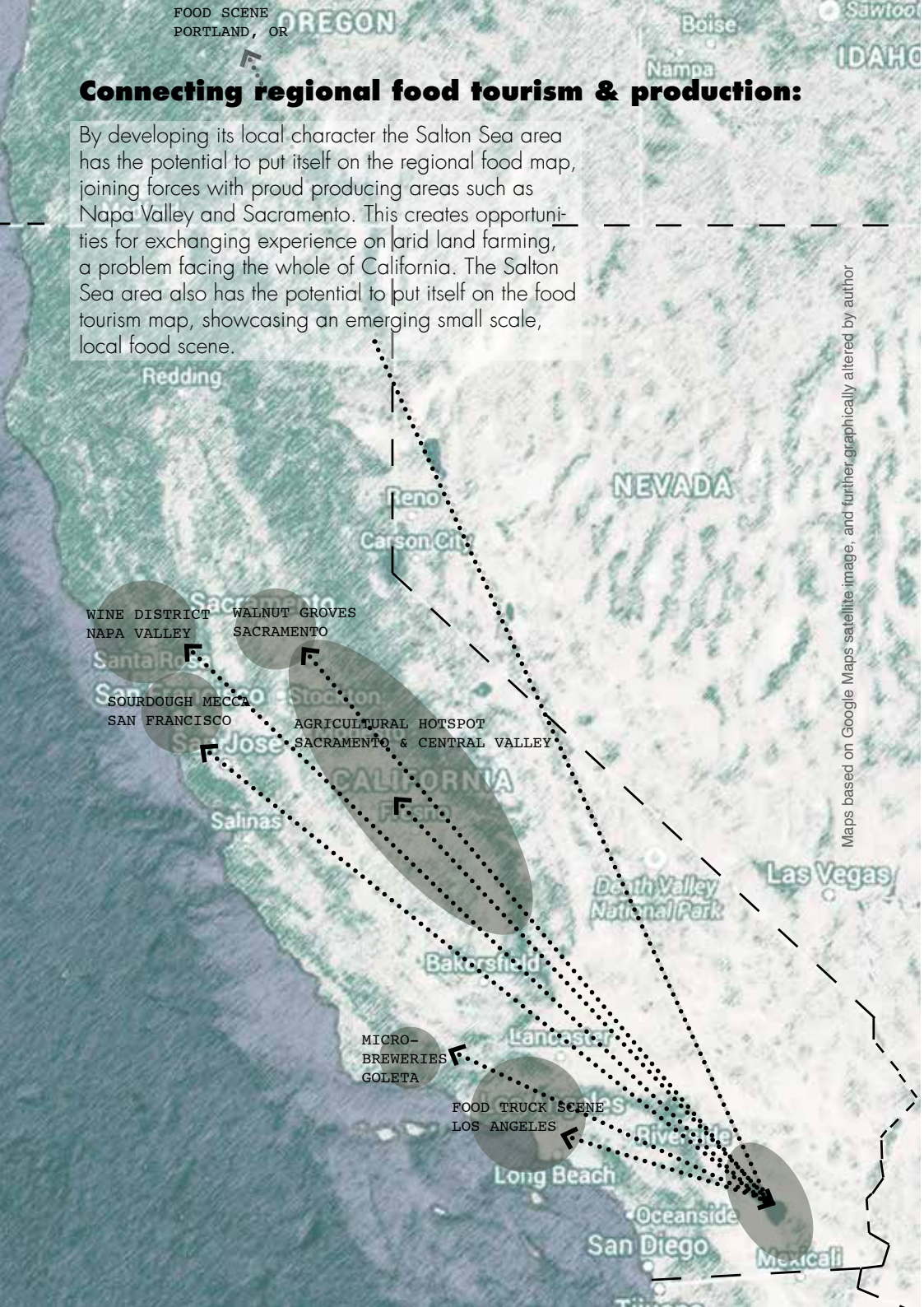
Theme garden farming
Committing to a food manifesto guide the establishing of a local food network. Themes as experimental gardening, or Mexican flavour could be explored.

Growing a local food scene:

In close collaboration with the test sites of food production new retail spaces could blossom. Supermarkets with local crops, farmers markets, wholesale straight from the fields, local food from food trucks and diners all help creates awareness, inspire and benefit from a new type of small-scale farming economy. Local producers could develop the local flavours, processing berries to jam etc. In this way the local community could benefit on their agriculture to a greater extent.

Local supermarket
Local supply of fresh, responsible food convenient offered at the local supermarket.

Farmers market
Weekly events of marketing local crops put food on the agenda.



Connecting regional food tourism & production:

By developing its local character the Salton Sea area has the potential to put itself on the regional food map, joining forces with proud producing areas such as Napa Valley and Sacramento. This creates opportunities for exchanging experience on arid land farming, a problem facing the whole of California. The Salton Sea area also has the potential to put itself on the food tourism map, showcasing an emerging small scale, local food scene.

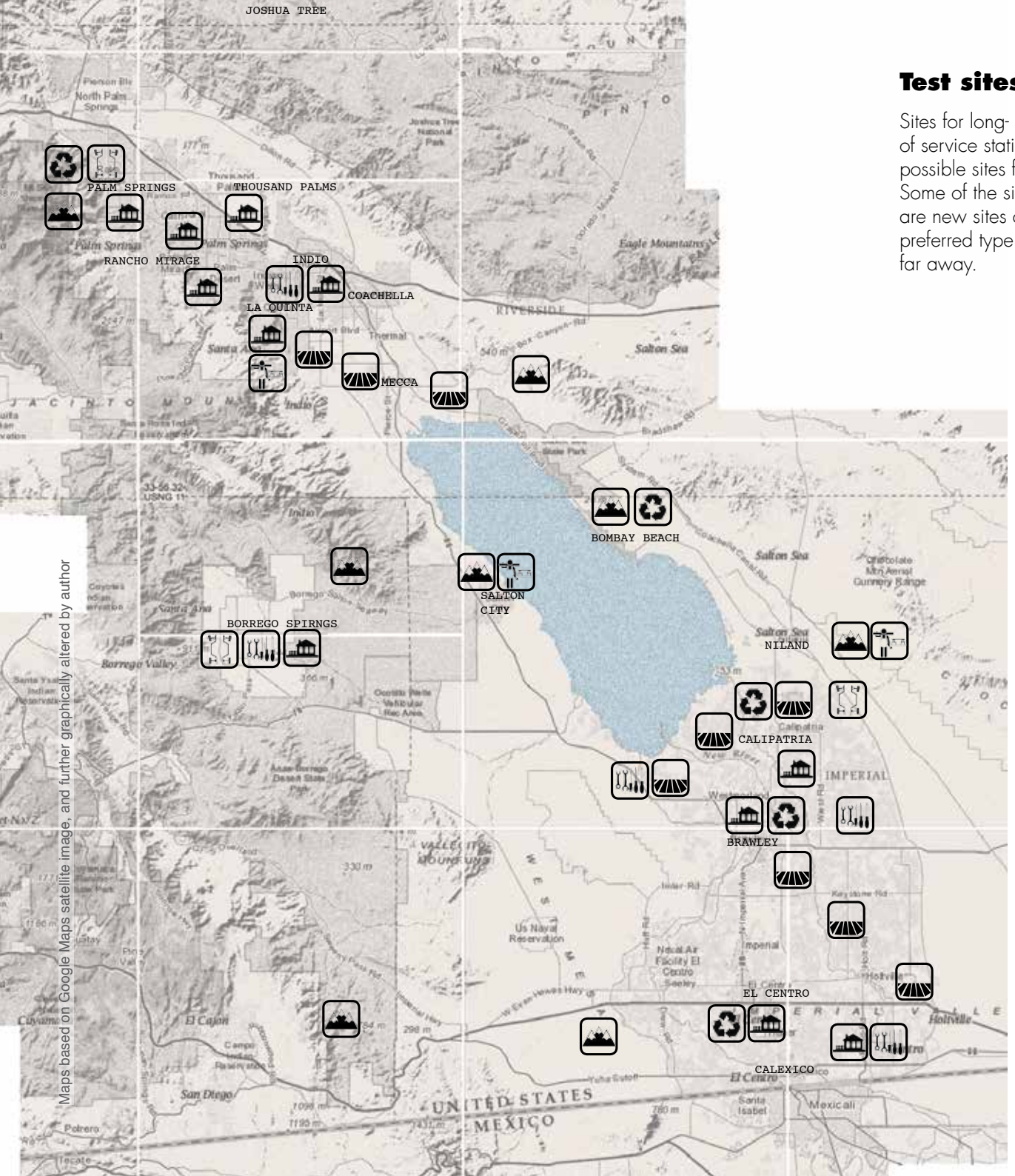
conceptualizing dwelling 2.0

_offering a new generation of mobile homes

The proposal focuses on how an increasing appreciation for alternative ways of living in the desert could be achieved by offering a new type of mobile homes. The new generation of mobile homes has the potential to become a model for sustainable housing; easily removed and claiming limited space - which is convenient in the desert climate. It would serve as a small self-contained type of urbanization typology, allowing for recycling of resources such as sun power and water. In order to cater for different types of users and needs the mobile home is designed with a system of modules. The mobile homes are suggested to be adapted for different usage such as shorter stay-tourism, seasonal "snowbirds" spending half a year in the area, agricultural workers in need of temporary housing during labour intense periods, and as permanent homes as an alternative lifestyle. The design proposal points out a number of sites appropriate for the mobile homes. Furthermore, a number of different "working stations" are suggested. The stations would serve as repair shops, recycling points for reclaimed building material, assembling clubs and DIY-shops for custom making. The working stations purpose beyond purely functional spaces would be as community building gathering points, educational platforms and inspirational showrooms.

When introducing a non-invasive type of dwelling that is adapted to the deserts limited resources and climate, it would contribute to an increased awareness towards the resources being used. There would also be positive consequences in form of more resource efficient type of living. The anticipated consequence over time would be that the dwelling type challenges the typical way of how the area is inhabited, and helps initiating a different type of tourism in the area. By changing the tourism scene from a resort-based destination to a more local, arid experience the water landscape can be released from some of the pressure it now endures.

Appreciating alternative ways of living in the desert
The arid land has special environmental and climate conditions. Appreciating this opens up for a local and specific style of dwelling.



Test sites for living:

Sites for long- or short-term parking, as well as a number of service stations sites are suggested on the map as possible sites for mobile homes introduced in the area. Some of the sites relate to existing off-the-grid sites, other are new sites catering for other needs. Regardless of preferred type of site, a service station should not be too far away.

TYPOLOGY OF PARKING SITES:

REMOTE NATURE

RURAL FIELDS

URBAN BLOCKS

TYPOLOGY OF SERVICE SITES:

REPAIR SHOPS

RECYCLING POINT

ASSEMBLING CLUB

CUSTOM MADE DIY

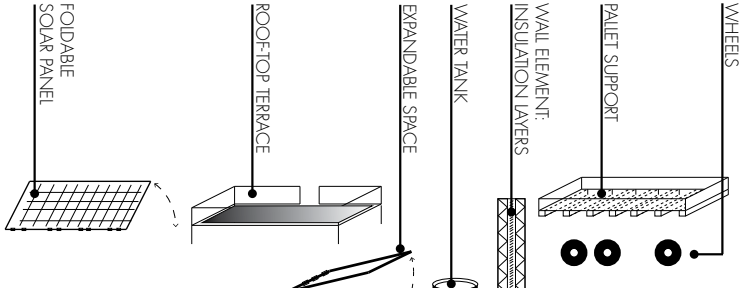
Parking sites and community service

The parking sites cater for different needs and preferences, offering a range of scenery from (sub-)urban, to rural or solitary nature surroundings. A number of different service stations further add to the community.

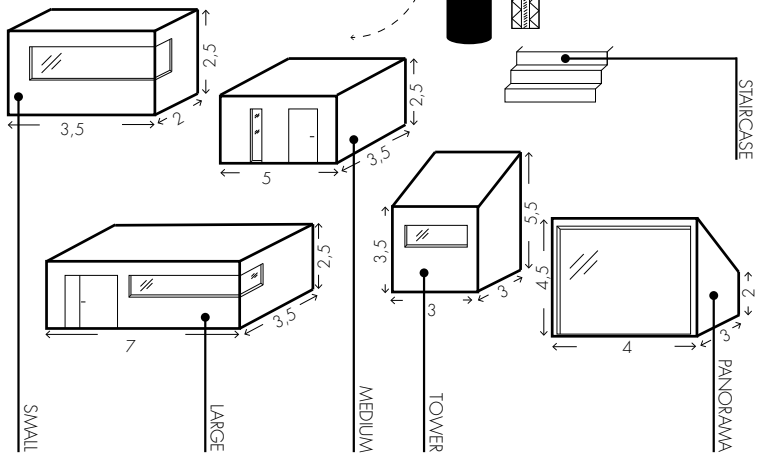
Introducing a model for housing

By introducing housing types in a module system it has the capability to cater for different needs; short-term to longer stay. The modules are non-invasive as they are moveable and claiming limited space. Features such as water tanks, solar panels and insulation layers for reduced heat in summers and for warmth in winters enable a more sustainable living.

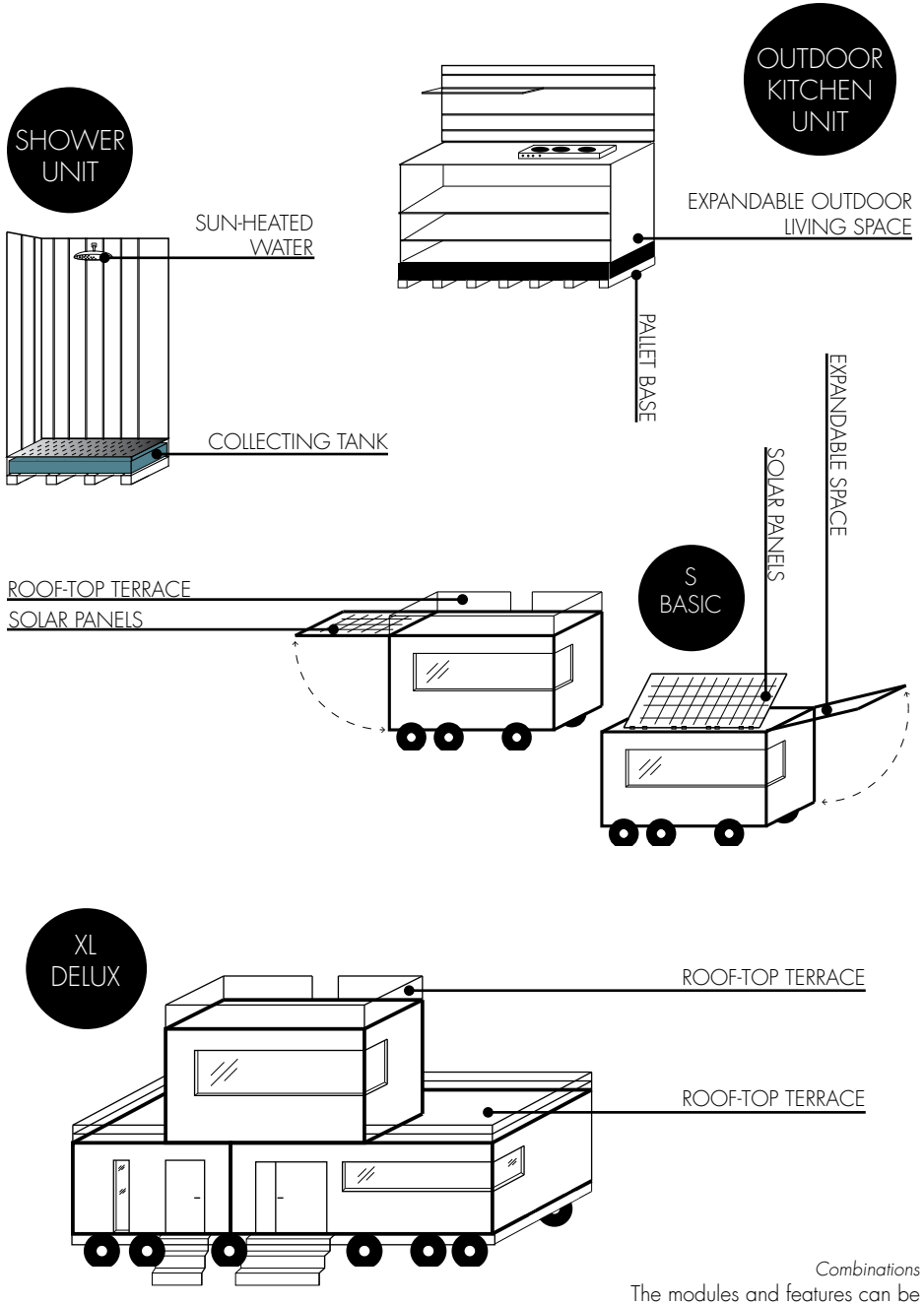
FEATURES:



MODULES:



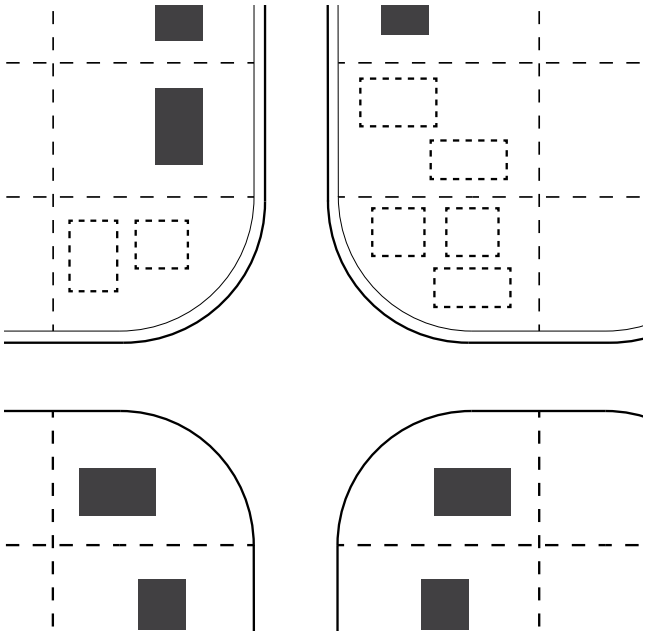
Modular living
Features such as water tanks & solar panels are added to chosen collection of modules.



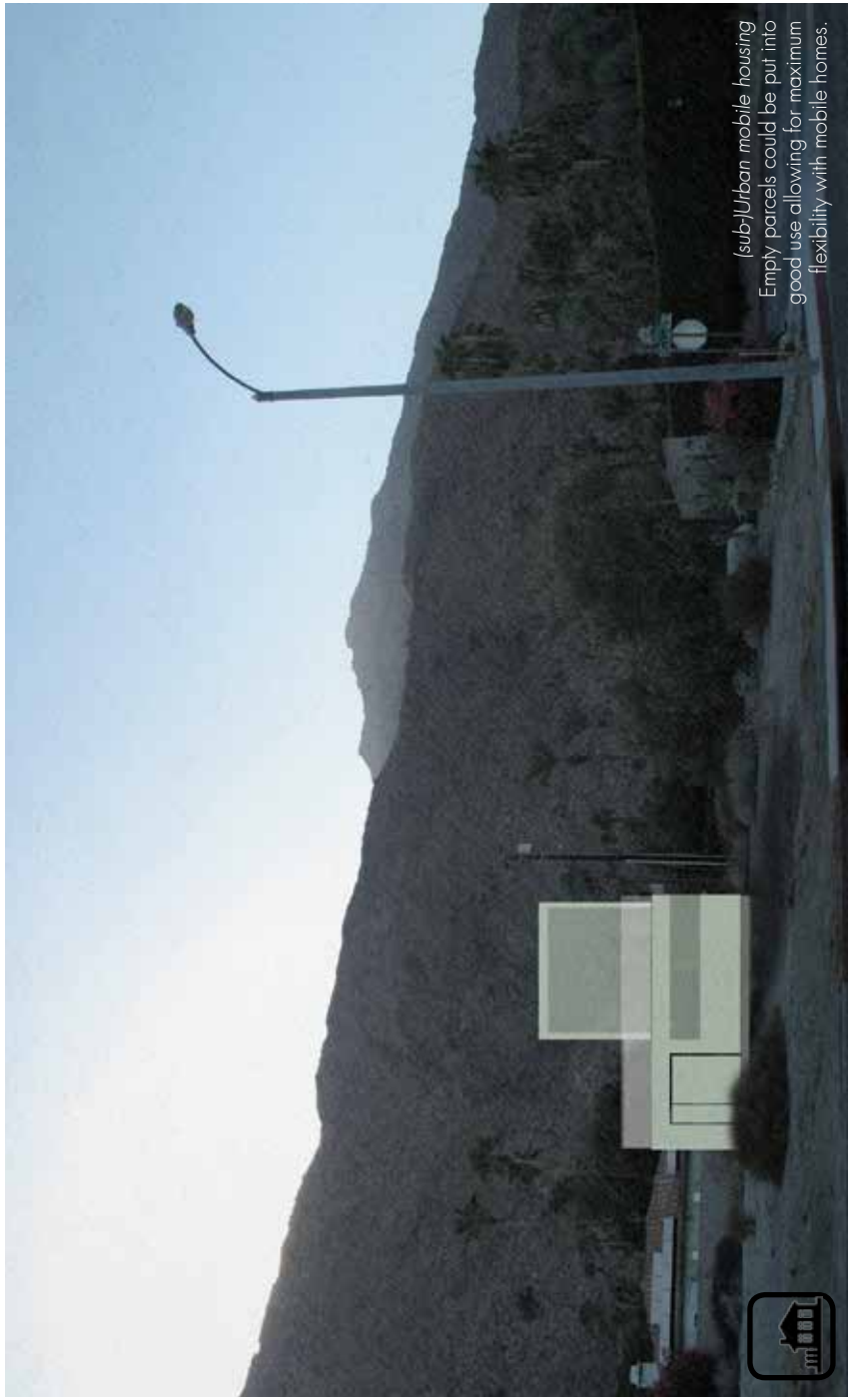
Combinations
The modules and features can be combined in order to cater for different needs. Outdoor showers & kitchens take advantage of outdoor space.

Urban block typology:

Mobile housing could also be used in urban areas. The constructions could be very short-term as temporary holiday homes, or be in place over longer time.



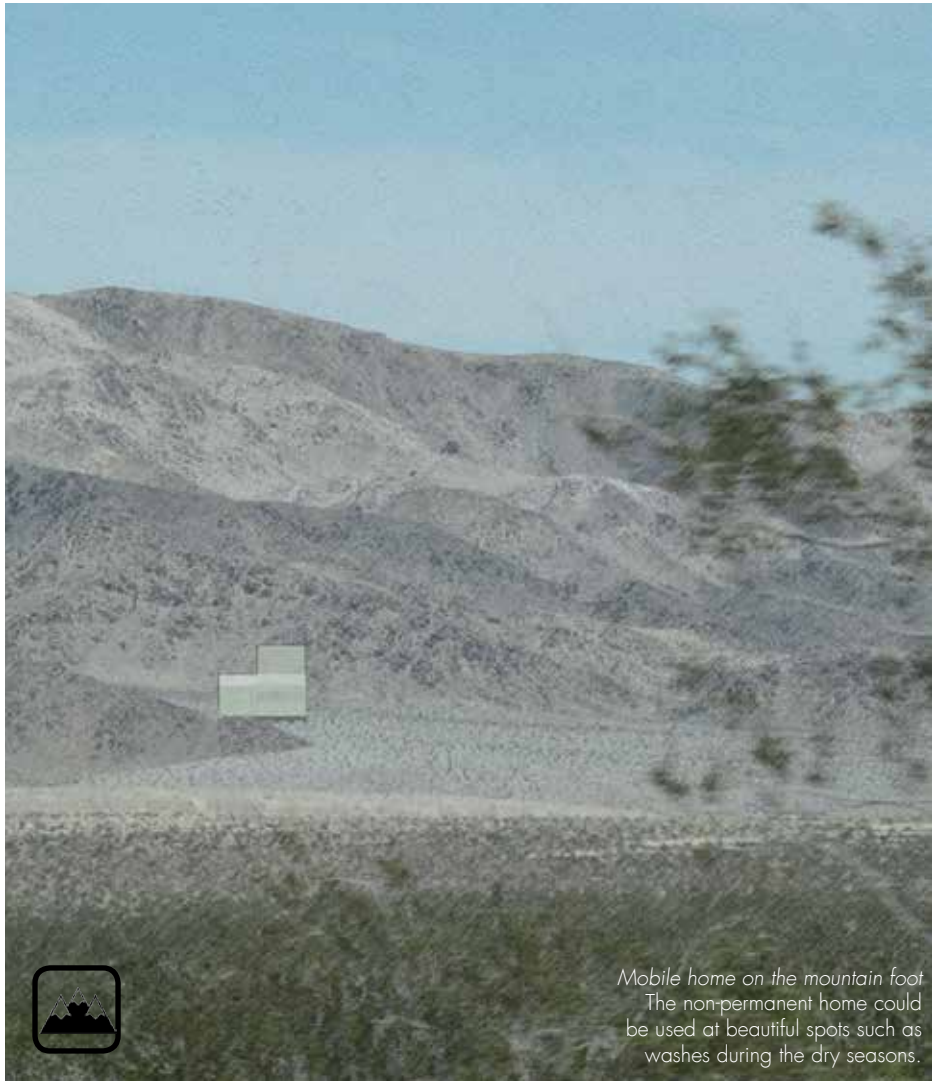
Plan: urban block
Undeveloped parcels could be used as sites for mobile homes, enabling higher or lower density urbanity depending on demand.



(sub-)Urban mobile housing
Empty parcels could be put into good use allowing for maximum flexibility with mobile homes.

Site of remote nature in arid lands:

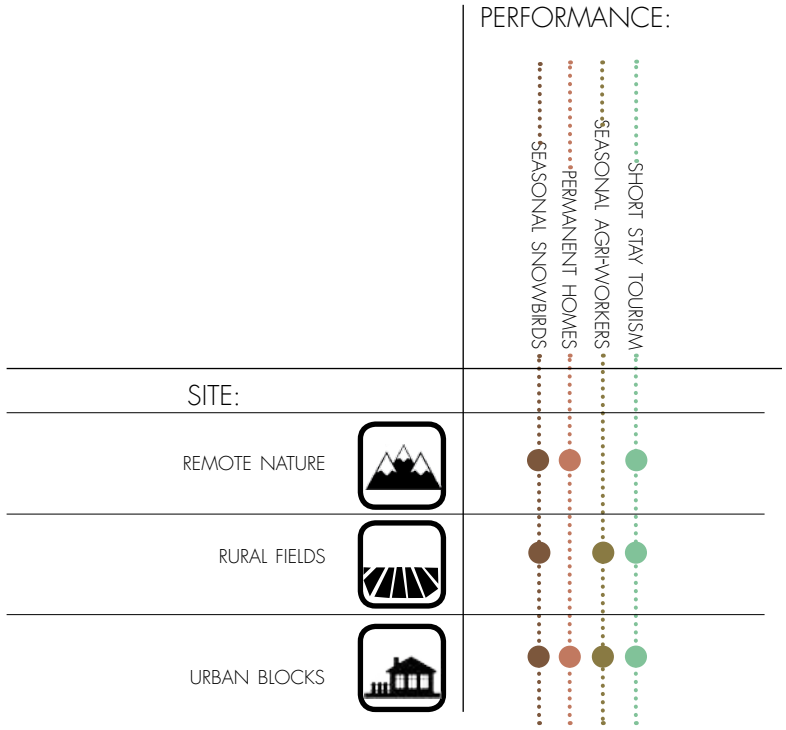
Mobile homes in remote nature locations could offer spectacular nature experiences within the area, perfect for short stay tourists as well as others seeking solitude and clear view of the Milky Way at night.



Mobile home on the mountain foot
The non-permanent home could be used at beautiful spots such as washes during the dry seasons.

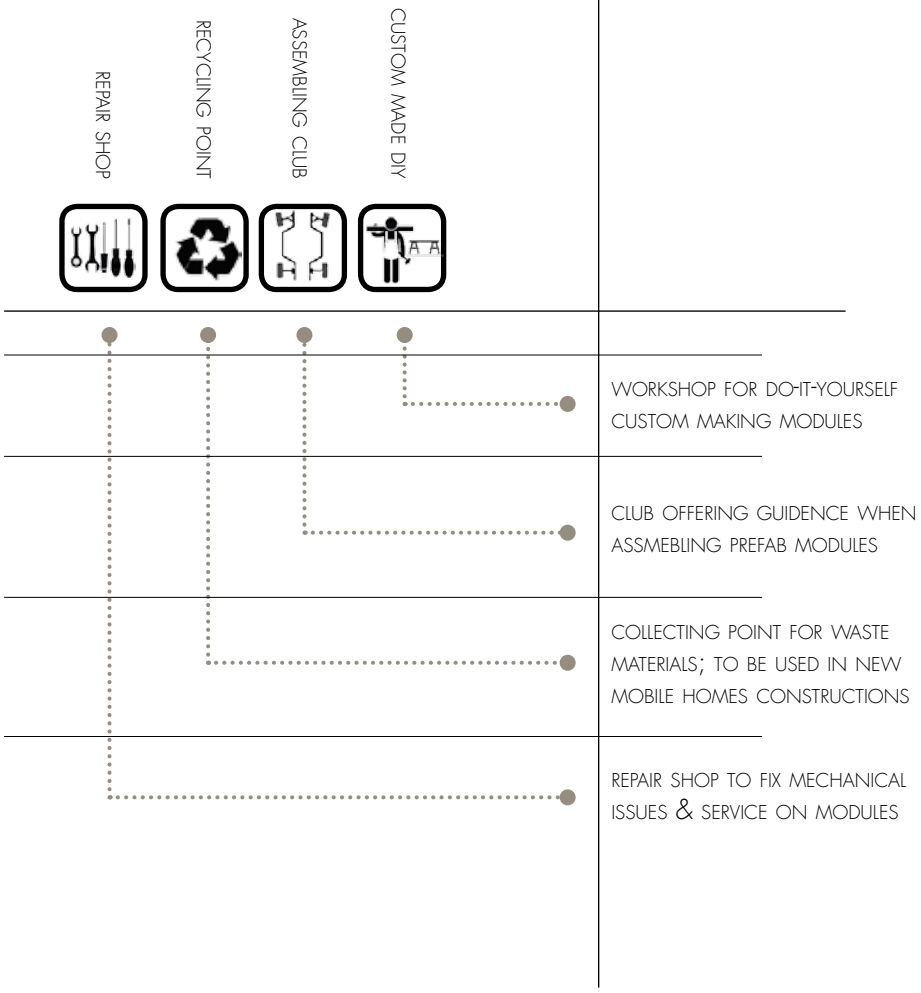
Performing space:

The parking sites have the capability to cater for different needs; remote nature, rural fields and the urban block all offer a variety of strong points. Seasonal workers may appreciate the closeness to work, or the community of the urban block. Seasonal elderly "snowbirds" spending half the year in the area may enjoy a remote nature experience, as well as tourists might.

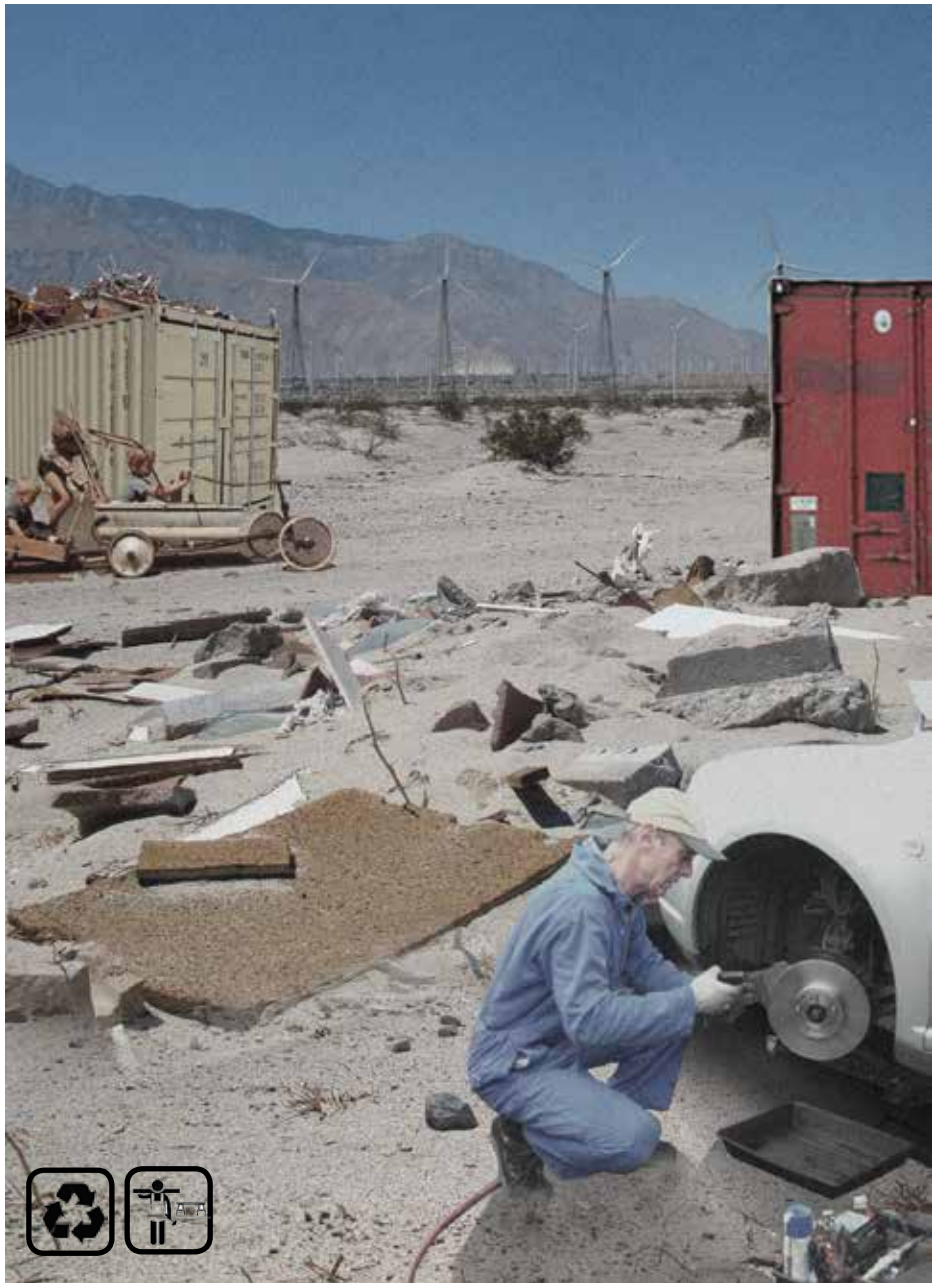


Site & Occupancy
The parking sites different characters suits a number of different occupants, with dynamic flows over the year.

WORKING STATIONS:



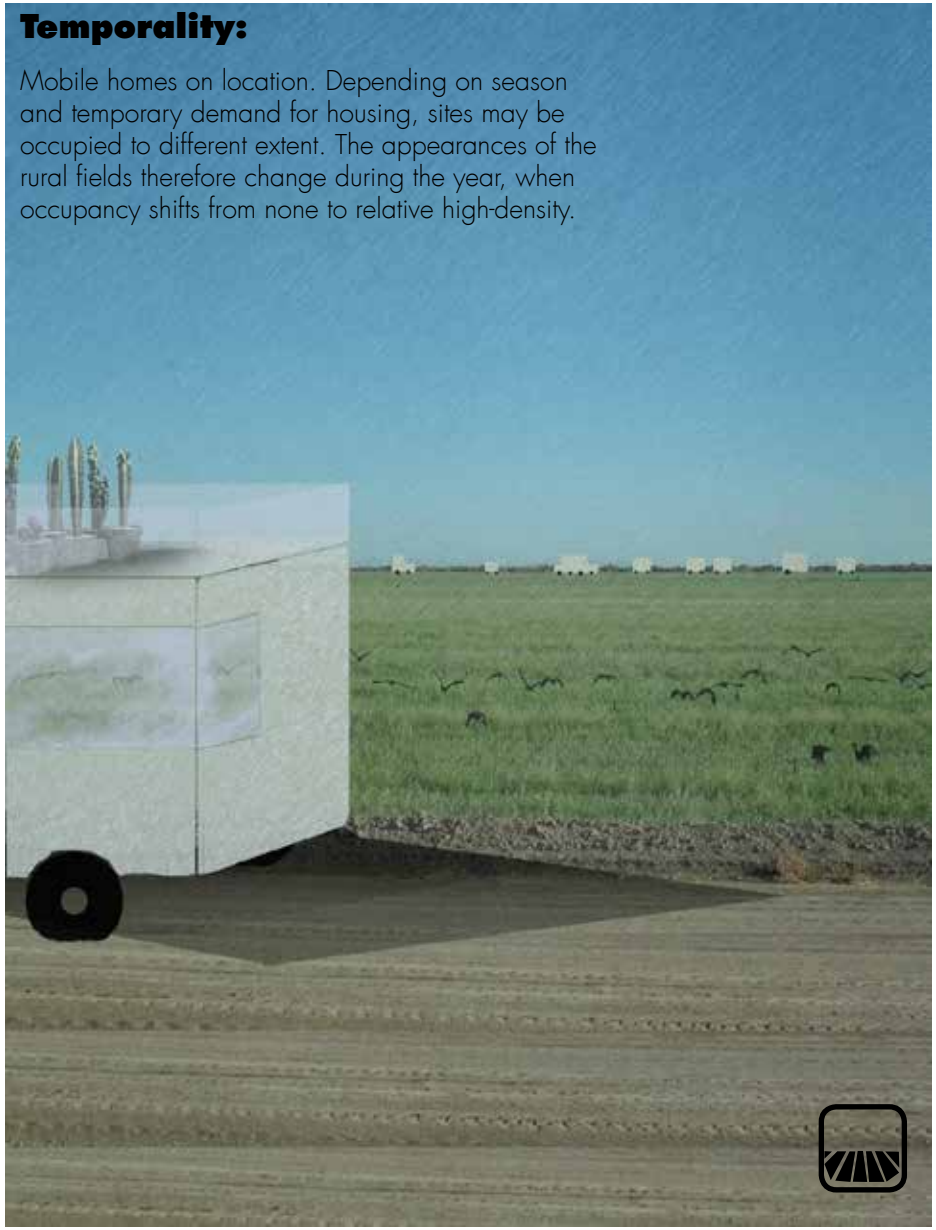
Working stations for community building
Besides offering services for assembling and repair of mobile homes, the working stations serve as inspiration, showroom and places to meet other mobile home dwellers - slowly building informal communities.



Working station: recycling point
The thrash-to-treasure aesthetic found in alternative desert dwellings could inspire when introducing recycling points and DIY-workshops.

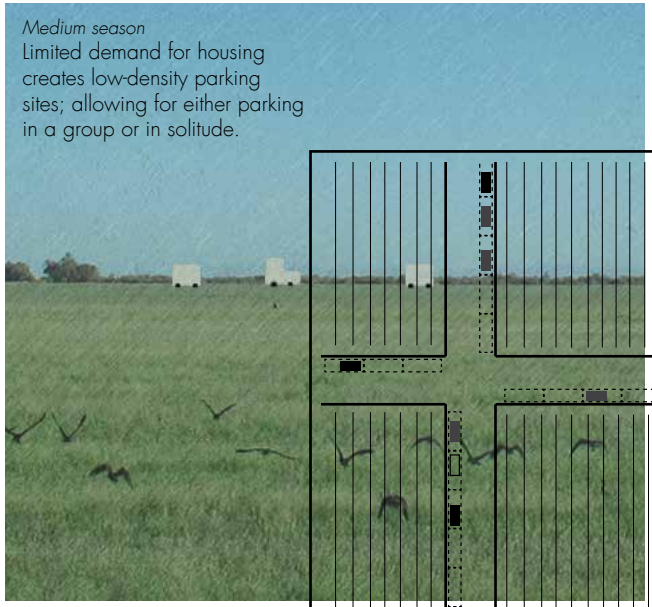
Temporality:

Mobile homes on location. Depending on season and temporary demand for housing, sites may be occupied to different extent. The appearances of the rural fields therefore change during the year, when occupancy shifts from none to relative high-density.



Peak season
Crowded countryside - prime season in the agriculture is followed by an increase in temporary homes in rural setting.

Low season
When demand for housing is at its lowest, view over the fields may remain undisturbed.



Medium season
Limited demand for housing creates low-density parking sites; allowing for either parking in a group or in solitude.

Plan: sites on rural location
Parking space for mobile homes could be arranged around fields, following the grid-structure.

conceiving a network of test sites
_allowing a process in flux

In order to maximize the three design proposals of Designing arid beauty, Cultivating local flavour, and Conceptualizing dwelling 2.0, the test sites need to be integrated into a larger network. Where possible, different activities should be combined as a way of providing attractive environments and to achieve as big impact as possible. This subchapter focuses on suggestions of how combinations of the design interventions could be spatially envisioned. It is also of importance to recognize the concept of a test site – a process built on trial and error. When allowing the network to be a process in flux it also enables new test sites to be added and for new types of conceptual spatial transformations to be integrated in the network. It should allow for action from the ground up, in order for transformation and local ownership to happen. Openness and responsiveness is key for developing the network, allowing for its users to change and suggest improvements. The project needs to be developed over time in order to avoid being regarded as static or finished.

Integrated network:

Different test sites could happily be combined into spaces offering a variety of functions and activities. A successful playground could in the next phase be accompanied by some gardening, or a supermarket could be combined with a small-scale food factory, and so on. When test sites are combined they might be even more attractive than before, reinforcing the positive effects in the area.

Combining test sites
The concept of co-op garden farming could be great to combine with mobile homes at some sites and times during the year for maximum convenience.

Synergies
When combining test sites as playground, kitchen gardens and local food trucks spaces becomes even nicer hang-outs, encouraging people to stay longer and engage.

SCHOOL KITCHEN GARDEN

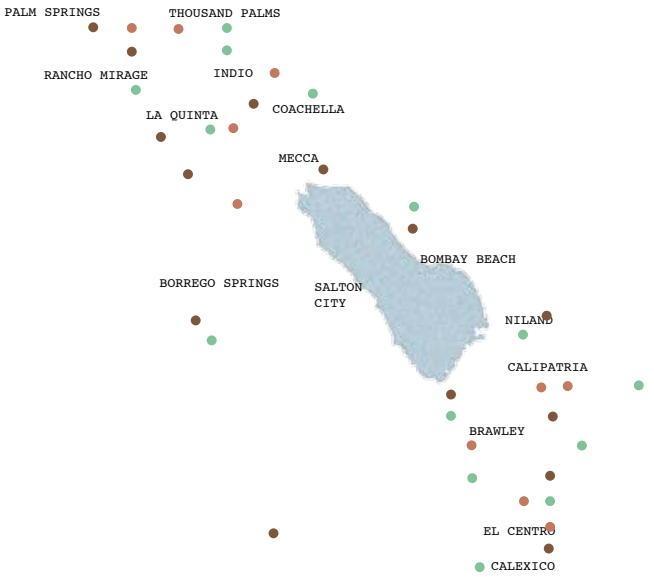
LOCAL FOOD TRUCK/DINER

ARID PLAYGROUND

Building a network over time:

When allowing for a network in flux the process takes time. The maps suggest how it possibly *could* look like in two, eight, and fifteen years. The map merely indicates a moment in time, and not an ideal or finished system. Rather they serve as visions of how the test sites might develop in the area, where in reality some may fail and others join.

PHASE 1:



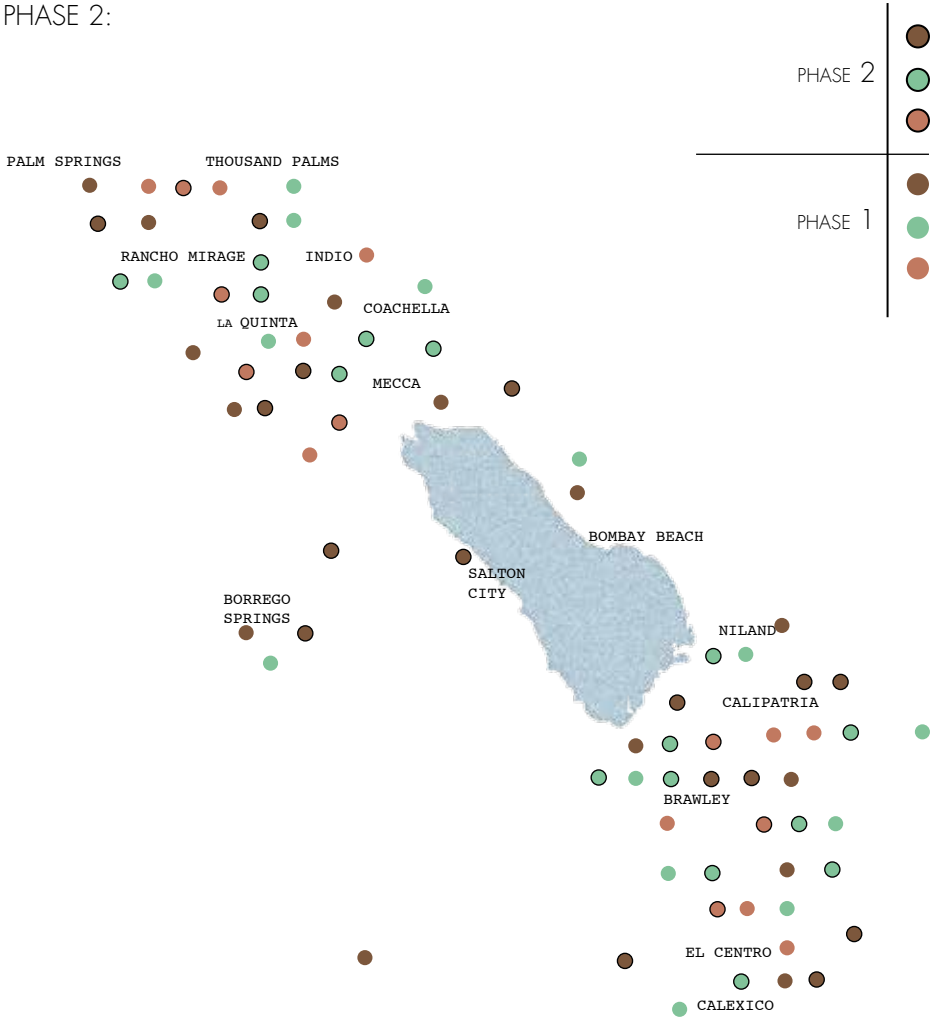
DESIGNING ARID BEAUTY

CULTIVATING LOCAL FLAVOUR

CONCEPTUALIZING DWELLING 2.0

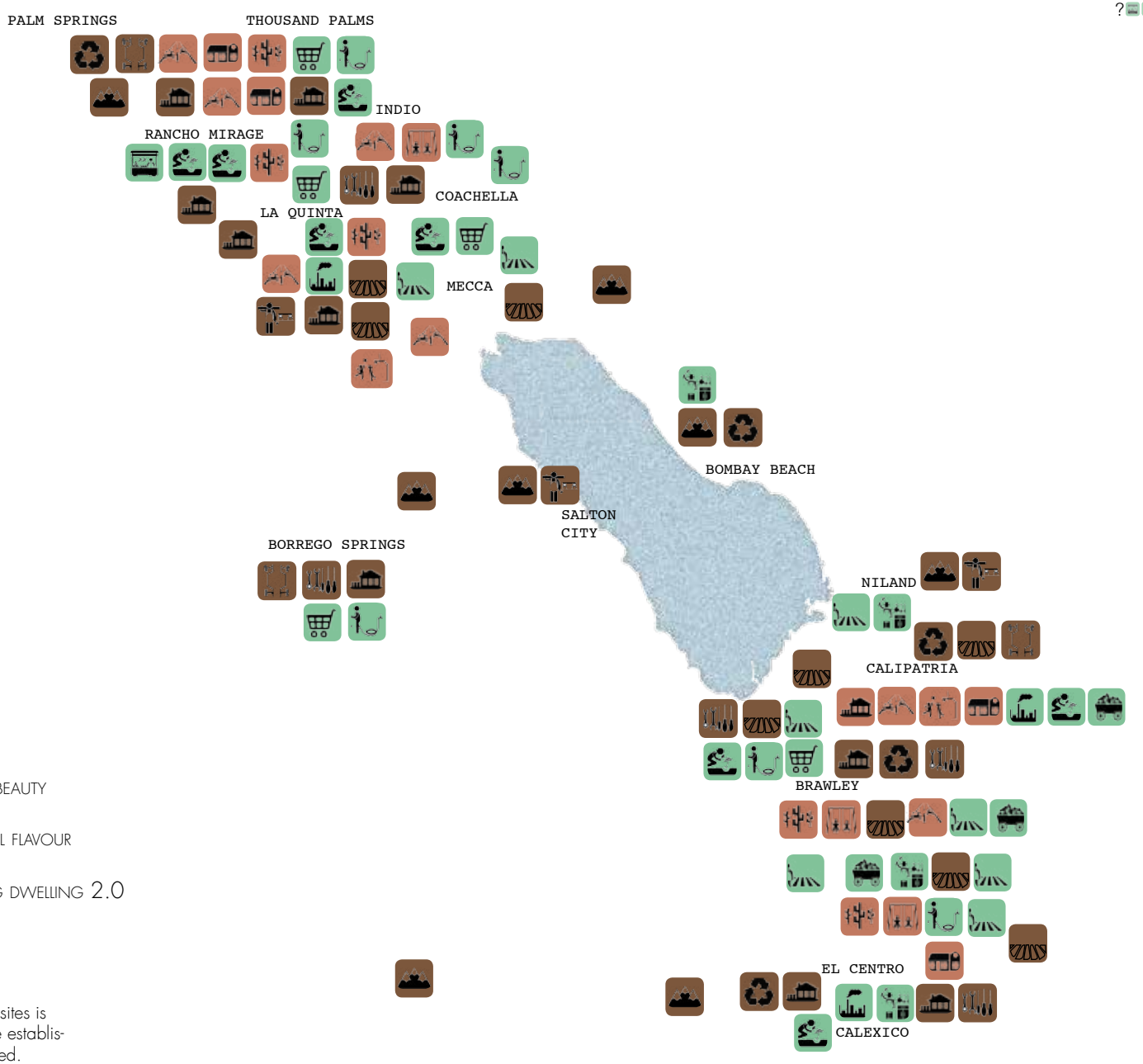
Phase 1: 1-2 years
During the first two years a number of test sites should serve as kick-starter projects, building a base for future development.

PHASE 2:



Phase 2: 3-8 years
The next phase might be less intensive than the first phase, but still adding significant small test sites to the network. During this period some test sites may prove less successful and be replaced by others.

PHASE 3:



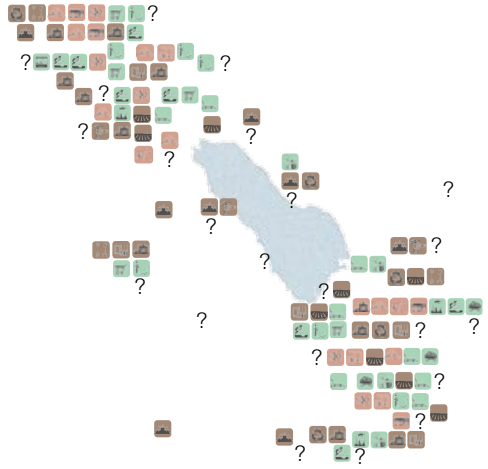
DESIGNING ARID BEAUTY

CULTIVATING LOCAL FLAVOUR

CONCEPTUALIZING DWELLING 2.0

Phase 3: 9-15 years
In phase 3 additional test sites is added, where others have established themselves and matured.

PHASE 4:



Phase 4: 16 -> years
After the initial fifteen years a new period of time for the test site network will come. What have changed in fifteen years? Should other test site themes be introduced?

Reflections:

Thinking about....

Transecting the Salton Sea area

This work has been concerned with systemic change, engaging in speculative design work perceived as a form of visionary organizing. With the intention to study constructed landscapes of the Salton Sea area I have searched for attitudes that are related to the water use producing the specific landscapes in the area. I have looked for attitudes and sites that would potentially be able to become driving forces towards a more sustainable use of water in the area, and in focus for this work has been the central question *"How to identify and translate these driving forces into scenarios of a living landscape also in the future?"*

Water Landscapes

The topic of water use and landscape constructions in the Salton Sea area has been interesting from the perspective of sustainability; but also acknowledging the power water holds as a societal organizer.

The method of the Deviant Transect used in this thesis, points at water landscapes as potent areas for investigation of transient sites, and embraces the influence of water conditions on human settlement. It further points out that the effects of human practices on aquatic systems over time best can be apprehended by investigating conditions of economic and social change through the lens of landscape architecture (Diedrich et al. 2014). This understanding has turned out to be productive when trying to grasp different aspect and the interconnectedness of issues regarding land use in the Salton Sea area.

The Other

The Deviant Transect method further draws on notions of 'the other'. The method adopts a transareal approach, explained as exploring a particular geographical and cultural area from the perspective of another background, in order to produce new knowledge. By exploring test sites in unknown territories - the explorer becomes 'the other', armed with a set of individual preconceptions and previous experiences (Braae et al. 2013, p 192). In my work, the understanding and position of myself as 'other' has proven both helpful and complicated. The on-site experience during fieldwork have ranged from complete novelty; trying to understand the concept of American water laws and approach to concepts of nature and wilderness; to more familiar situations of using landscape architectural skills, for example when interpreting geological and ecological signs in the landscape.

Pre-Travel Phase

When applying the method of the Deviant Transect a number of factors have influenced the work. The pre-travel phase has no doubt benefitted from the large amount of information, available through literature scrutiny on the Salton Sea area. Through numerous sources I have been able to study the area from multiple aspects, which has influenced the pre-travel itinerary, maybe even making it too detailed. My fear of having an already too detailed itinerary at the start turned out to be of no greater concern, as I found plenty of opportunities to deviate from the original plan - maybe only on a smaller scale than otherwise might have been anticipated.

Recordings

The means of recording also came to somewhat deviate from the suggested tools of the Deviant Transect. I had opted for the GPS recording already in the pre-travel mode, a tool that combined with sampling, proved to be great on site. Photography came to be my main form of recording, easy and performed with speed during the hours of hot desert sun. I also filmed a lot during fieldwork, not processed as much as anticipated, but still lingering in memory as on-site knowledge. Other tools suggested by the Deviant Transect method, such as sketching and on-site modeling I quickly abandoned. This was partly due to the relative time consumed by the recording, and partly to personal habits.

Sketching as a tool has however proved useful to me during the post-travel phase, in the process of sorting, evaluating and combining findings. The performance of sketching and writing over photos has helped me clarify and explain issues - to myself and hopefully to you, the reader. The sketching therefore could be perceived as both an analytical tool, and as an answer to my struggle to communicate the findings. In previous methodological work of the Canarysect, Diedrich, Lee and Braae conclude that much knowledge is produced in between or in the intersection of the tools (Diedrich et al. 2014). This has also been the case of this work, where some knowledge have been generated through or in between, but where I have opted to later communicate it by the means of an over-photo-sketch.

Relational Transformations

The transformations suggested in this work could not have been conceived without the means of the Deviant Transect. Fieldwork has served as preparation of terrain, needed to suggest transformations drawing upon what is already in place. The deviant transect as a method have enabled freedom; to move, to follow my nose and to experience the site without too many predefined boundaries. The methodological aim of the Deviant Transect, to enable designers to better capture intangible aspects of existing sites in order to support relational transformation (Diedrich et al. 2014) seems therefore to be applicable. This thesis suggest rather humble site transformations, relating to tendency's observed and building on what is already partly in place in the Salton Sea area. This approach relates not only to the method of the Deviant Transect, but also to the type of small scale grass root movements advocated by Grace Lee Boggs, discussed in the theoretical framework of this thesis.

Sensing Atmospheric Qualities

The Deviant Transect method searches for ways of capturing qualities on-site, using bodily immersion and our senses in order to add to the knowledge gained before hand studying facts and figures. While being on-site, bodily immersion and using my senses became tools that added to the perceived site diversity. Especially intangible aspects such as bodily experience of scale, texture and heat came alive and became important features of the site. Atmospheric qualities as walking alone over vast, dead orchards with the sun relentlessly burning my skin, the dry soil structure underneath my fingertips, and pesticide remains burning my lips after eating an orange picked from a tree on-site added to my site knowledge, used when constructing site narratives.

Seeds of questioning

When being on-site the 'prompts' of the Deviant Transect method evolved into what I call 'seeds of questioning', prior discussed. While not so clearly formulated during my travels, this came to be useful during post-travel work. Returning from the U.S with a bag full of material proved to be rather challenging. Contemplating the on-site experience, the issues facing the Salton Sea area seemed daunting, almost posing a 'unsolvable problem'. Here the seeds of questioning served as a mean of dividing the complex problem(s) into smaller, graspable issues, guiding the process forward.

Navigating in the Anthropocene

Through this thesis I position myself in the cultural climate of Antropocentrism critique. I have found it helpful to use the concept of the Anthropocene, in order to frame and facilitate the reading of experiences and material collected during fieldwork in the Salton Sea area. As suggested by Dirk Sijmons and Saskia Sassen earlier in this thesis, I have been able to use this new approach to land use constructions as an organizer of the messy phenomena's I encountered while travelling in the area. I also embrace the view regarding this as an opportunity, rather than a deterministic punishment to humankind.

The conceptualization of the age of the Anthropocene, as introduced by Paul Crutzen, has generated an increased interest in questioning the dualistic approach of separating the 'natural' and the 'cultural'. Antropocentrism critique challenges this dualism. When introducing the unitary term 'Andscapes', German researcher Martin Prominsky attempts to bridge this division between nature and culture, contributing to a new concept of nature in relation to landscape architecture (Prominsky, 2014). In the introduction to the anthology *'Architecture in the Anthropocene - Encounters Among Design, Deep Time, Science and Philosophy'* editor Etienne Turpin concludes that "with the scale of the planet as the horizon [...] it is not surprising that problem formulations are, within the condition of the Anthropocene, necessarily multi-disciplinary" (2013, p 5).

Also in the Nordic context is the concept of the Anthropocene gaining increased interest, embracing a multi-disciplinary approach. The forthcoming Nordes (Nordic Design Research) Conference is held under the theme of 'Design Ecologies - Challenging anthropocentrism in the design of sustainable futures'. Here attention is paid to the coupling of natural and artificial systems, and the challenges this poses due to its complexity and how it partly reveals the anthropocentrism that has traditionally characterised design. Topics such as 'Design for Sustainability', will be exploring tensions and possible bridging between radical and incremental solutions, local and global approaches, and non-anthropocentric and anthropocentric design approaches (Nordes 2015).

Moving across the realms of concern is also the work of Jane Wolff. In *'Landscapes of San Francisco Bay: Plates from Bay Lexicon'* (Wolff in Turpin 2013, p 86), she points at the interactions among human intensions, geographic circumstances, and environmental processes. Wolff conceives the Bay area as a landscape defined as an ecological hybrid. The specific place becomes a vehicle to raise general questions that exists in every hybrid landscape. In the same manners this thesis could be considered as moving across realms of concerns; the Salton Sea area and its specific challenges regarding water scarcity applies to both the local area, but simultaneously asks questions applicable on other areas. The question of how to navigate in the age of the Anthropocene is not only relevant in an American context, but is at its core global as well as local. Consequently the knowledge and insights gained from my endeavors into the American West and the Anthropocene will stay with me and I look forward to further exploration in future projects and working in a Scandinavian/European context.

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