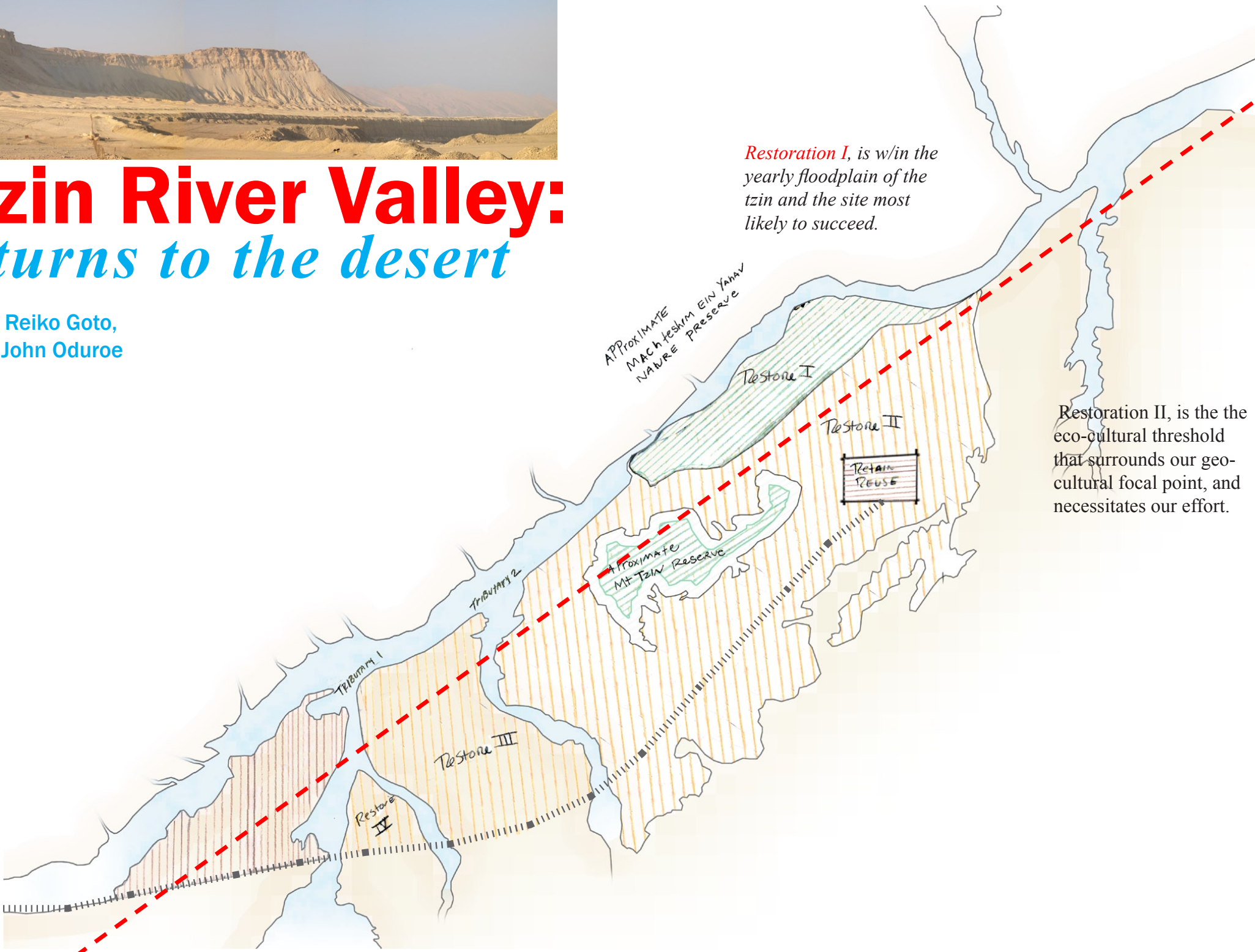




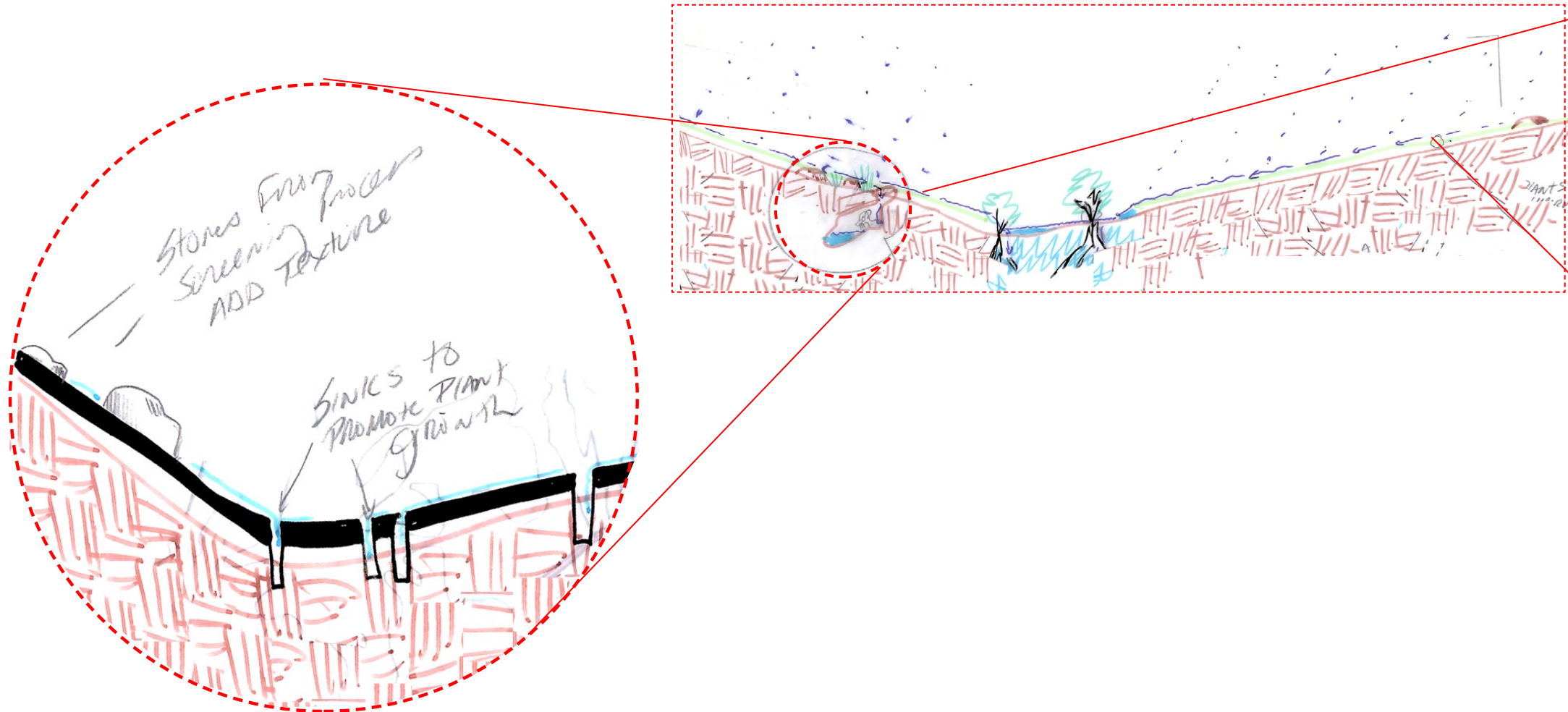
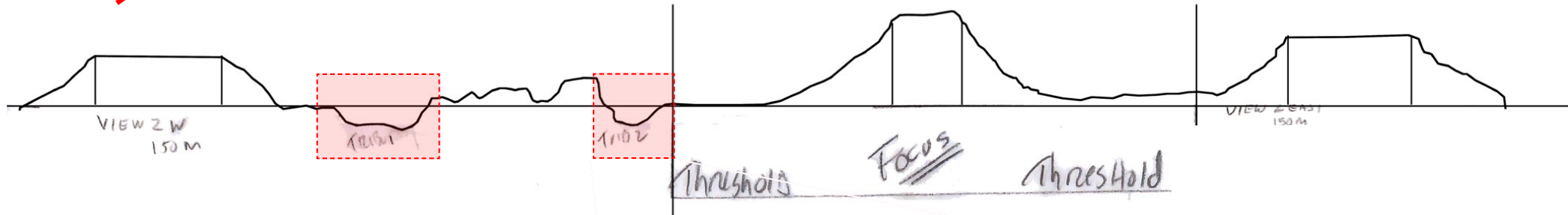
The Tzin River Valley: *Life returns to the desert*

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Restoration I, is w/in the yearly floodplain of the tzin and the site most likely to succeed.

Restoration II, is the the eco-cultural threshold that surrounds our geo-cultural focal point, and necessitates our effort.



Macro plants occur in relationship to structure (rocks) and sinks (animal holes, tree roots, etc...)

Micro plants create impervious surface.



A Proposal to restore the land and cultural values taken by a phosphate mine.

The Tzin Mountain or Mount Hor Ha' har limestone outcrop, is the focus of this work. The Rotem-Amfert-Negev mining operations, is the reason for it. The value of the Tzin Mountain and surrounding areas are defined by protected areas (the reserve) surrounding the Tzin mountain, and another reserve that traverses the mining site known as Mahteshim Ein Yahav. The exact intent and effect of these official land preserves is unclear as land seems to be mined whether protected or not. Furthermore existing stone fields of some geological import have been preserved and at the same time amended with stones from other areas of the mining operation.

We would like to propose a rehabilitation of a perimeter around Mt. Zin. In effect we would like to propose the rehabilitation of the sub-watershed that would have Mt. Zin as its focal point. In a natural occurring environment single cell plant communities create a significant crust that lets the seasonal rain move across the surface, and into the lower areas of the landscape. At the Rotem-Amfert-Negev mining site, the essential crust that served as a topsoil, is no longer available. The re-formed land percolates water through the soil, rather than moving it across the surface and into available sinks. As a result the meager amount of rainfall amounts to nothing, not enough to make a difference in any one place.

The Proposal

1. The challenge is to recreate the source – sink structure, at least initially through artificial means. We believe it would be possible to shape the overburden into natural forms, replicating the preexisting topography as closely as possible. Then coat these materials with a layer of impervious clay or marl. In this way, we re-introduce the source-sink form and hydrological function.
2. With the form and hydrological function recreated, it should be possible to redistribute surface stones from the phosphate washing process, and transplant plant materials and even areas of microphytic crust as an experiment in instigating the growth of the desert ecosystem. According to the literature that is initially available it seems that an area 10-15 meter square would have a potentially productive affect when configured in a source-sink relationship.

Goals

We are seeking to restore form, restore hydrologic function, which enables growth

Our short term goal, would be to reestablish first a form that replicates the conditions of the past, and provides the structural elements of a naturally occurring water and nutrient cycle.

Our mid term goal, would be to reestablish the plant communities the macrophytic plants; bushes and grasses as well as the microphytic plant communities, the single cell plants that would begin\ to reestablish the crust typical of this region.

Our long term goal would be to reestablish the habitat conditions that might allow the desert snail to return to this area. According to Groffman, Zaady and Shachak, Desert snails “have long been recognized as an important component of Negev Desert ecosystems.”²

Focal things demand our attention, our care and at times our skill to maintain, restore or rehabilitate them. These things develop in character with our attention. To understand rehabilitation as a focal practice we have to understand that this mined place has lost its story, its timeless identity has been subsumed by a program of linear thought, material desire and short term goals. If we choose to rehabilitate this place, we must invest in the idea of reciprocity between those that rehabilitate and the ecosystems that we are addressing. We must seek out reciprocity in between science and aesthetics, between the values of different cultures and participatory strategy. Following William Jordan⁵ we must return to gardening with the intent of benefiting nature rather than ourselves. The ultimate success of a focal approach to restoration will rely on the participation of as many people as practically possible. The goal of this rehabilitation is not simply to fix the land, but to create a new dialogue between people and ecosystems.



Pancratium sickenbergeri is a small Saharo-Arabian species common in the northern Negev.



Moricandia nitens is a Saharo-Arabian shrub that grows within groups in throiughtout the Negev.



Thymelea hirsuta is a small to large shrub that grows mainly in the western and northern Negev.



Polygonum equisetiforme is found in most parts of the Negev.

WEST

NORTH

EAST

SOUTH

WEST

