

This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



The Nexus between Water Conservation, Compact Neighborhoods, and Sustainability

Dr. Robert A. Fielden, FAIA, NCARB





<http://halfmealhabit.com/hydrate>

Water Conservation

Compact Neighborhoods

Sustainability

Chicago Midtown

Suburban Sprawl



<http://http://www.vipsaccess.com/luxury-hotels-chicago.html>



<http://toptravellers.net/chicago-view-from-an-airplane-illinois-united-states.html>

Water Conservation

Compact Neighborhoods

Sustainability

Guttenberg, NJ



<http://blog.livingonthehudson.com/2012/03/26/guttenberg-neighborhood-spotlight-on-galaxy-towers/>



<http://www.homesandland.com/For-Sale/Guttenberg,NJ/>

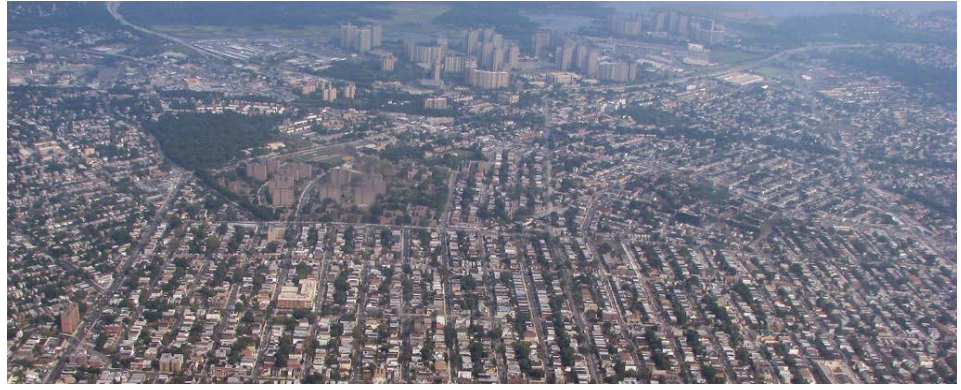
Water Conservation

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Sustainability

New York Communities

Bronx



http://2thebestimages.com/articles.php?p_sub=1&t=Aerial_Views_of_Cities

Queens



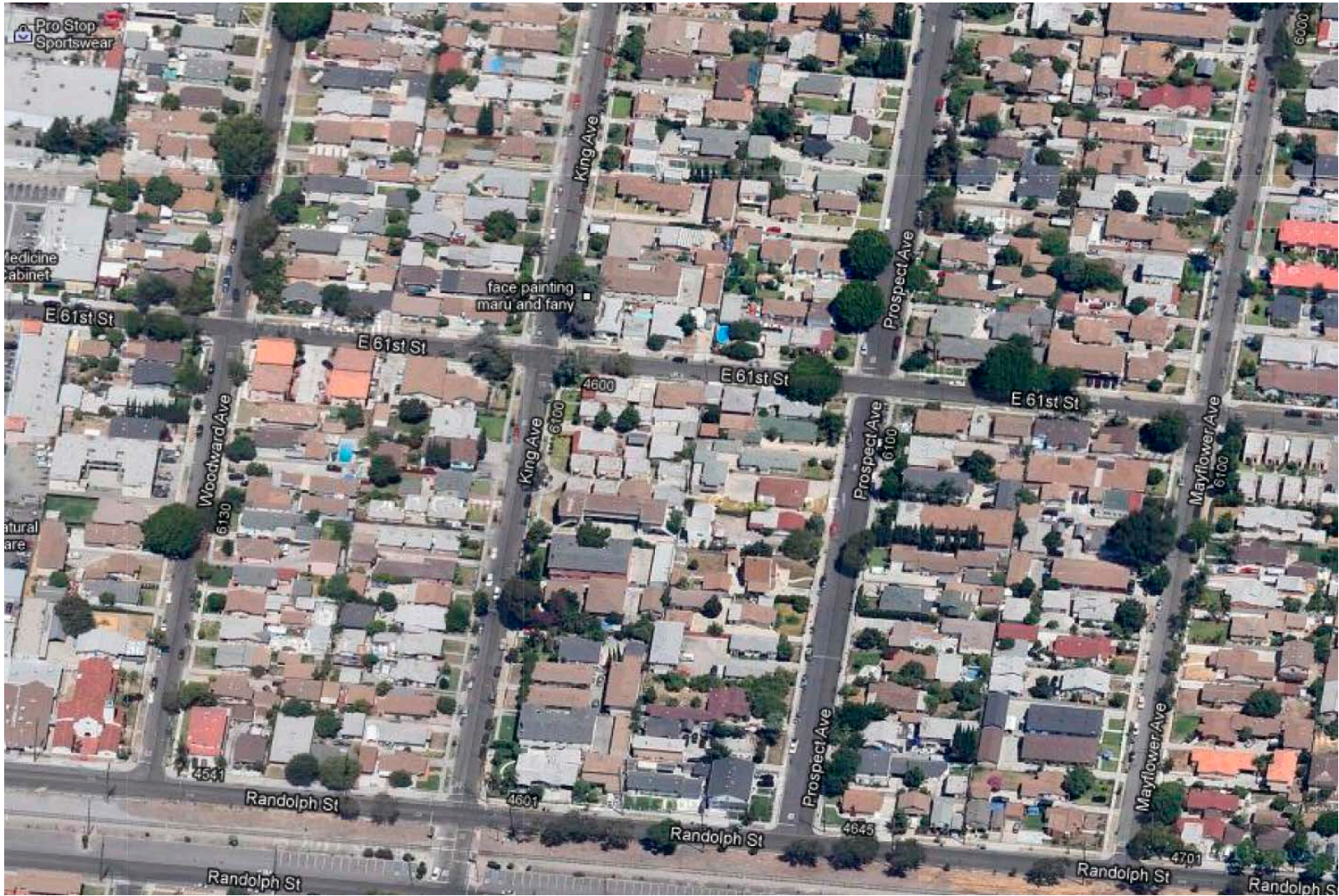
<http://http://www.rossiprojects.com/Blog/files/tag-queens.php>

Manhattan



<http://ceoworld.biz/ceo/2012/07/27/list-of-top-10-worst-cities-rent-deals-for-tenants-in-america>

Maywood, CA



<https://maps.google.com>

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Central Park



<http://www.newworldeconomics.com/archives/2012/082612.html>



<http://landarchs.com/aesthetics-vs-functionality/>

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Augusta, GA



<http://www.theaugustachurch.org/about-us/>

Huntsville, AL



<http://www2.dk-studio.com/inside.cfm?aid=11&pid=168>



<http://www.flickr.com/photos/designfeast/8402500396/>



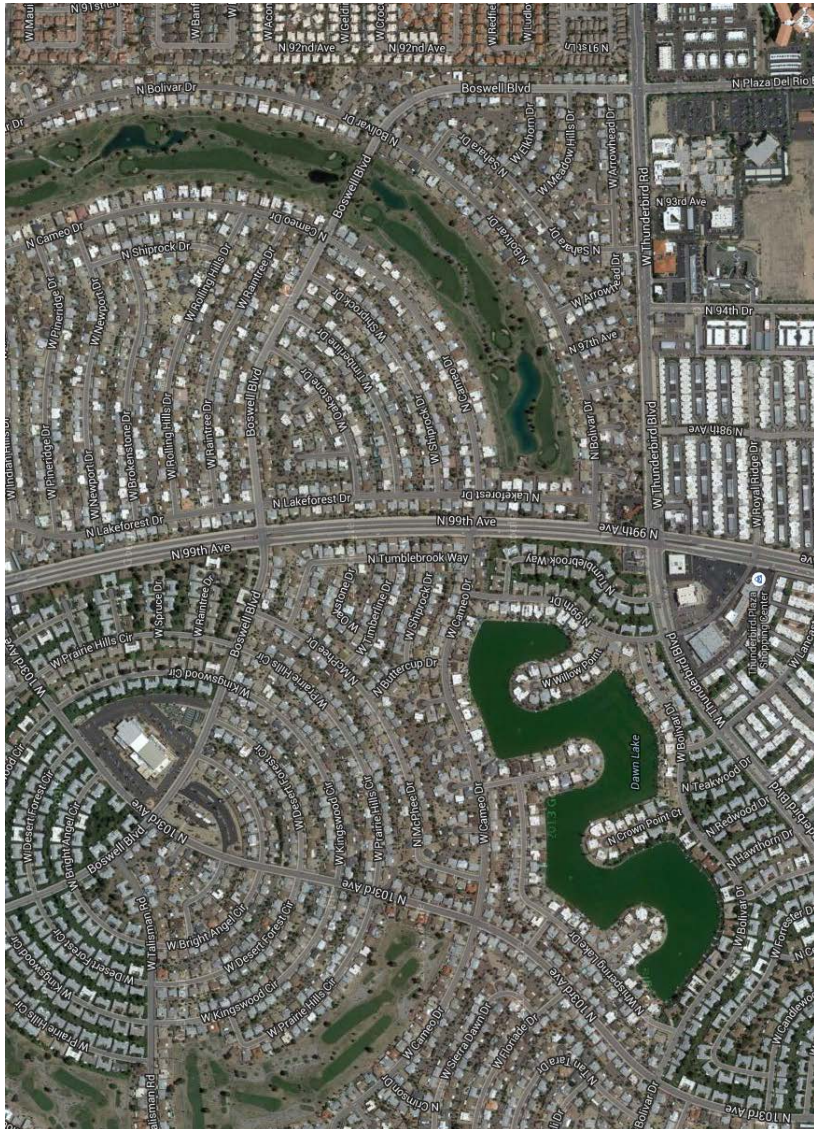
http://blog.al.com/breaking/2013/06/huntsville_may_spend_12m_on_tw.html

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Peoria, AZ



<https://maps.google.com>

Kansas City, MO



<http://www.palladiumboots.de/blog/airborn-exploration-0>

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Lubbock, TX



<http://islandbreath.blogspot.com/2013/01/dust-bowl-redux.html>

Las Cruces, NM



<http://widebayhighdesert.wordpress.com/2013/04/25/about-las-cruces-history-and-development-of-the-mesilla-valley/>

Water Conservation

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Summerlin



<http://www.kbhome.com/new-homes-las-vegas/the-summit-at-amado-in-summerlin>



<http://www.lasvegascondomania.com/area/SUMMERLIN.php>

Water Conservation

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The Las Vegas Strip



<http://thelasvegasweddingcompany.com/>

Water Conservation

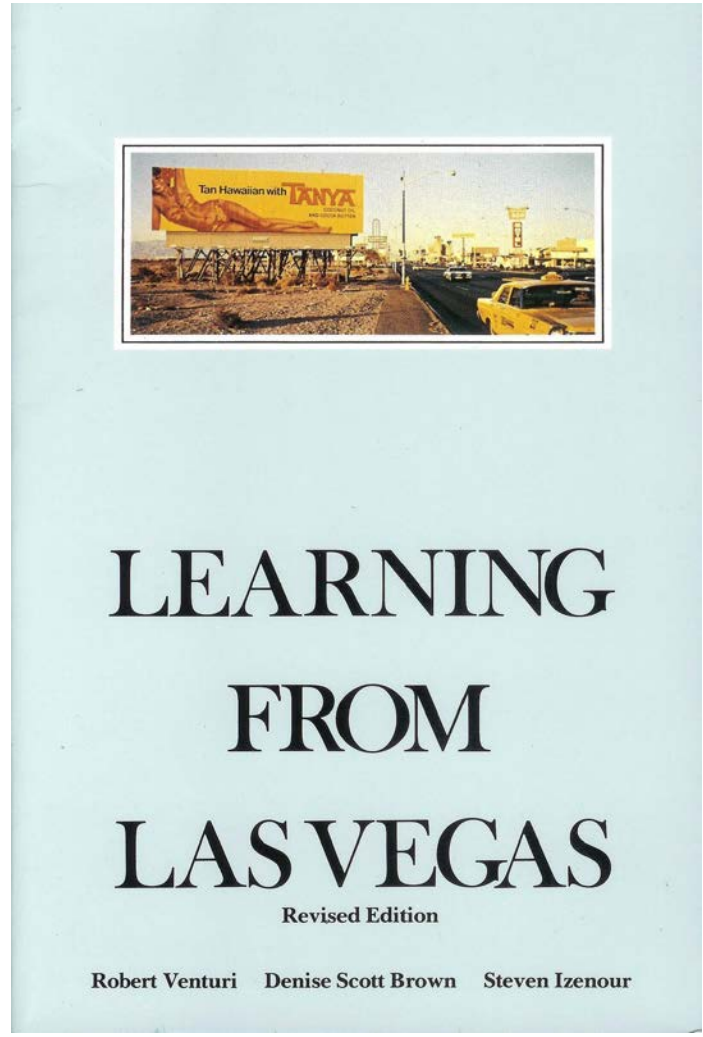
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Sustainability

What Happens in Vegas Stays in Vegas



<http://www.lasvegas360.com/>



<https://blogs.commonsgororgetown.edu/martinirvine/2013/05/01/cities-and-symbolic-space-relearning-from-las-vegas/>

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CREATING PLACE



REMAKING AMERICA GREEN

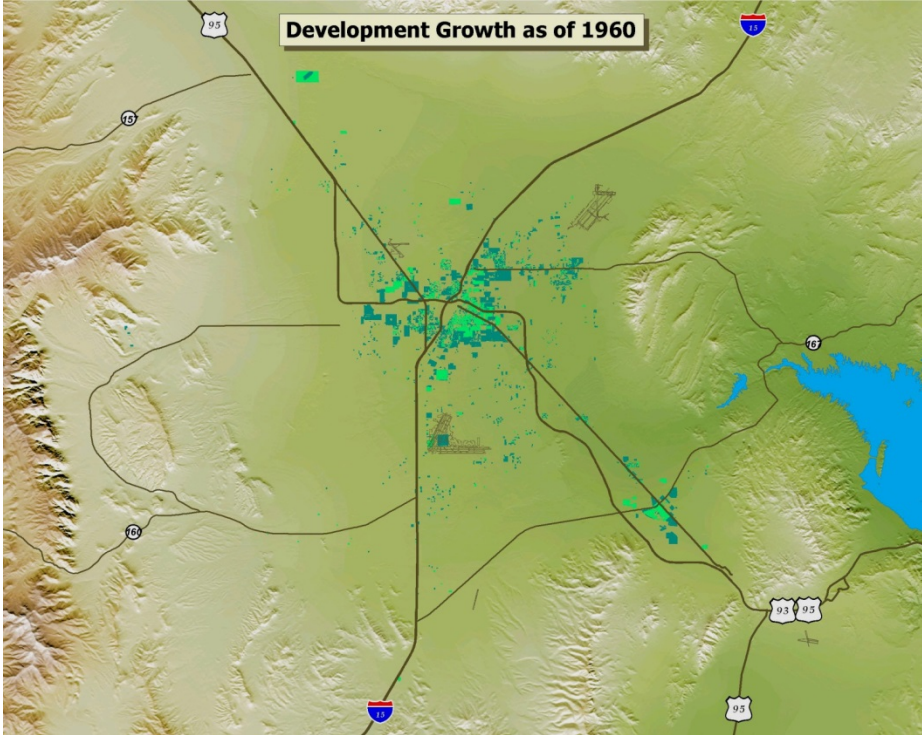
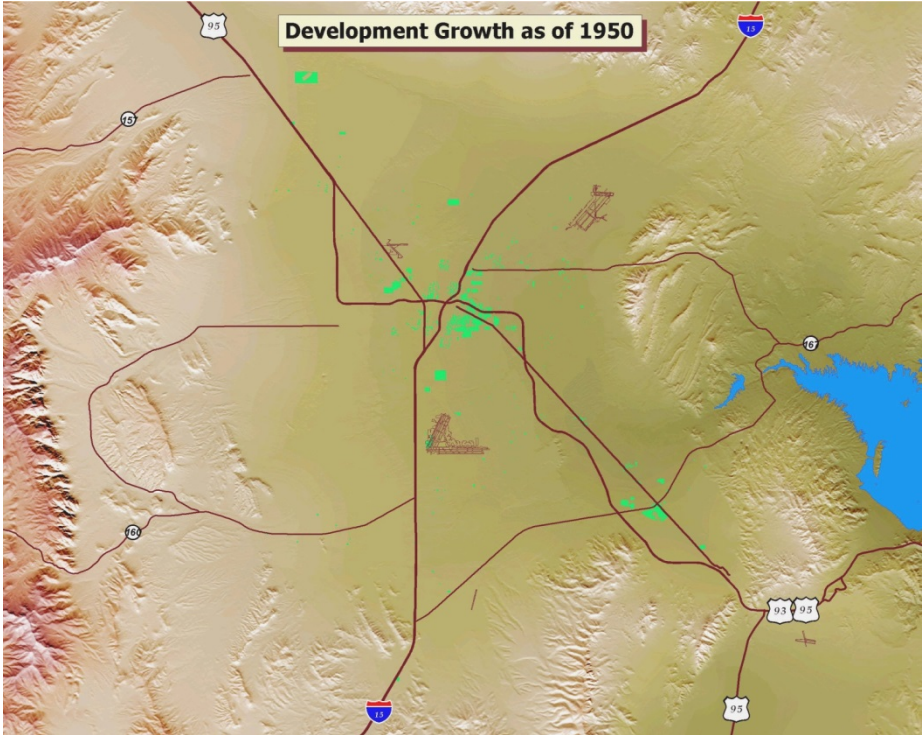
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Water Conservation

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Las Vegas Valley Growth in the 1950s and 1960s

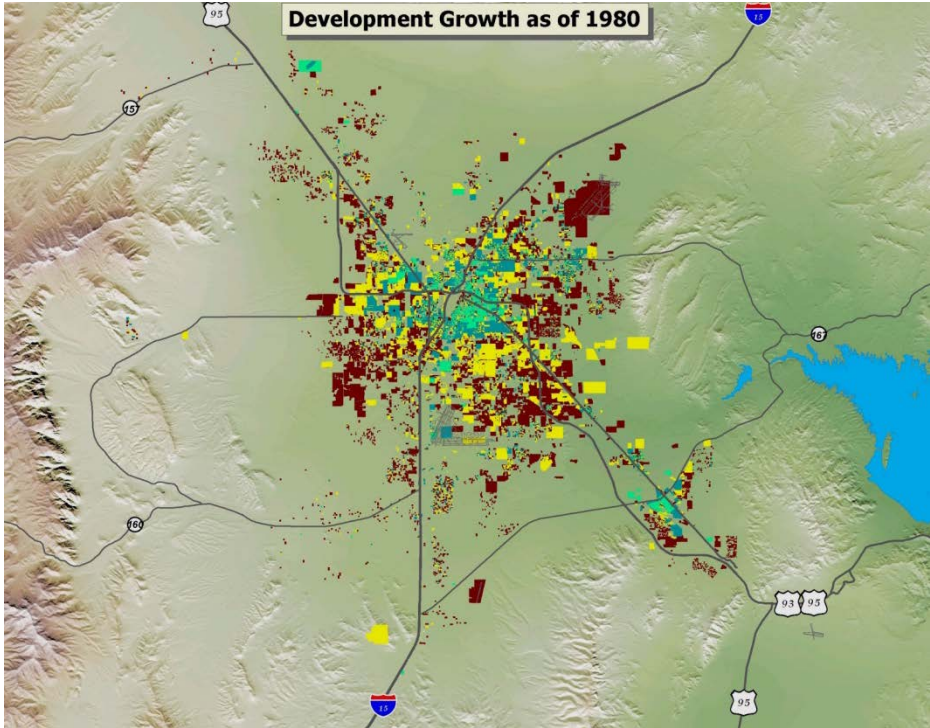
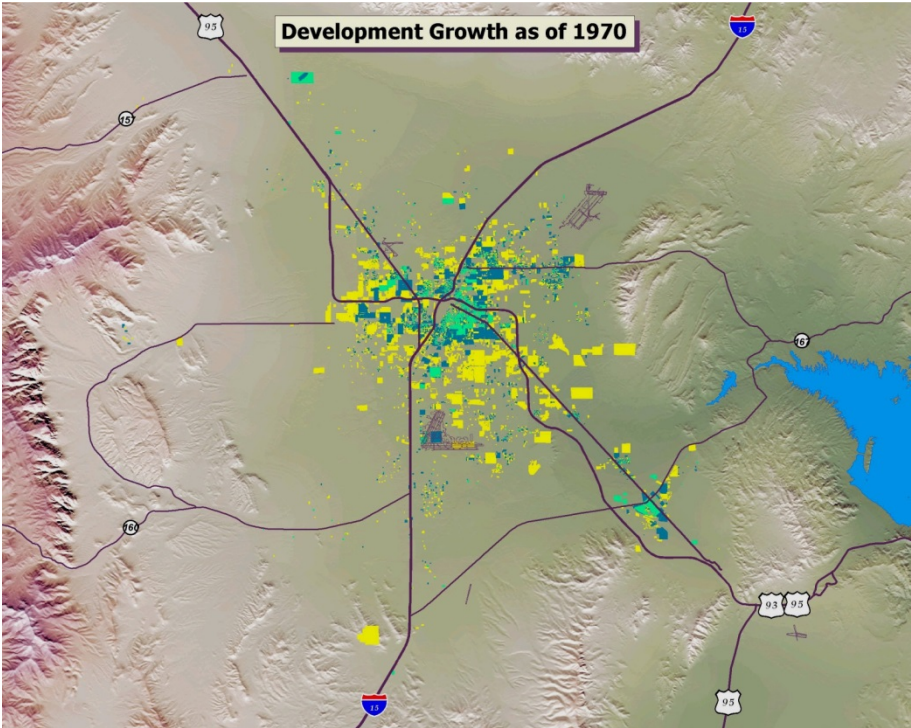


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Las Vegas Valley Growth in the 1970s and 1980s

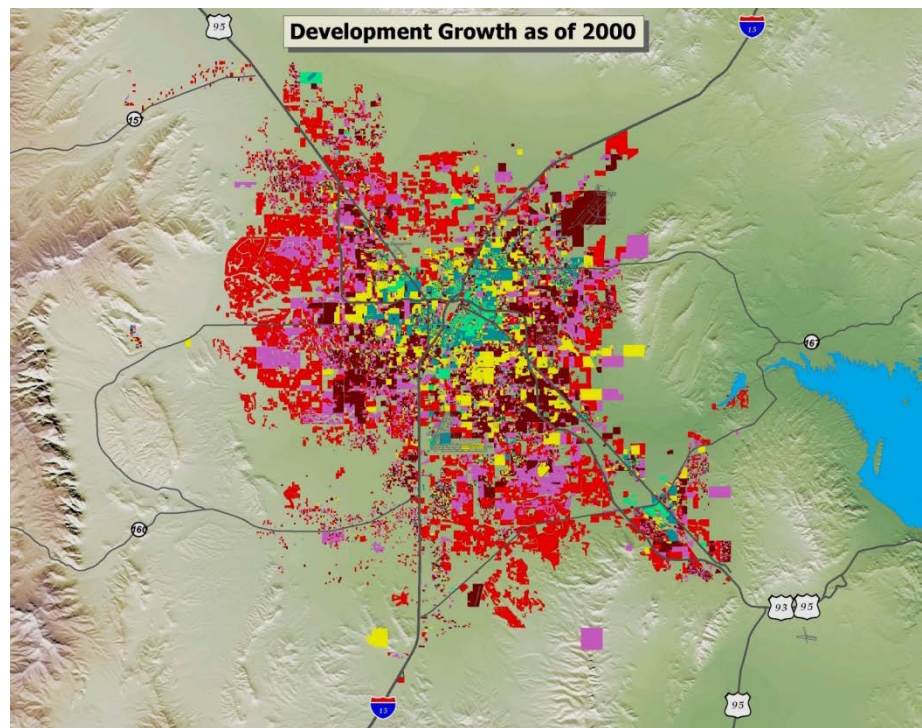
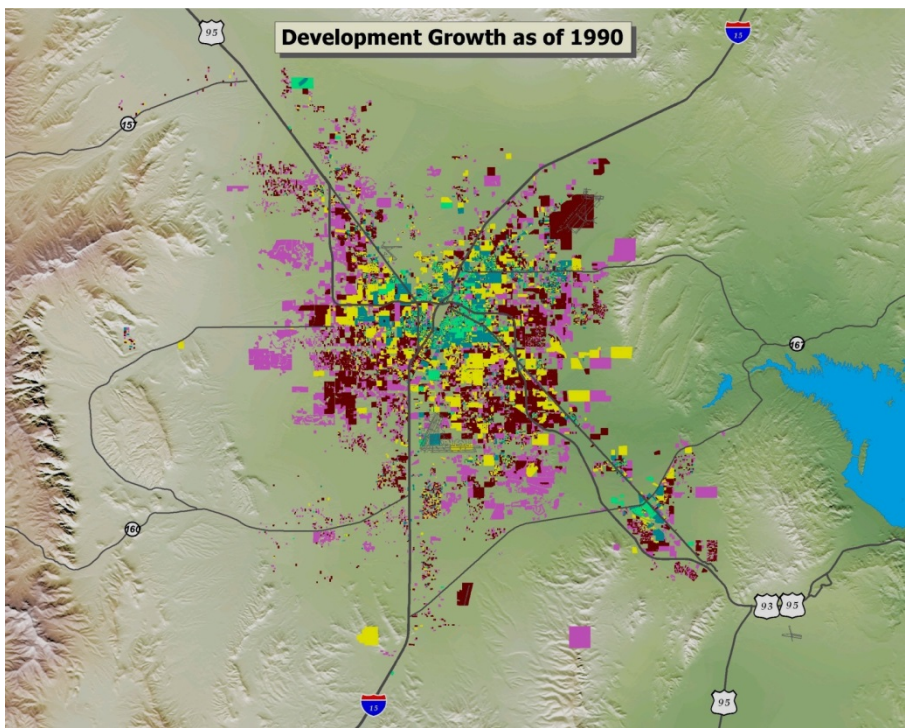


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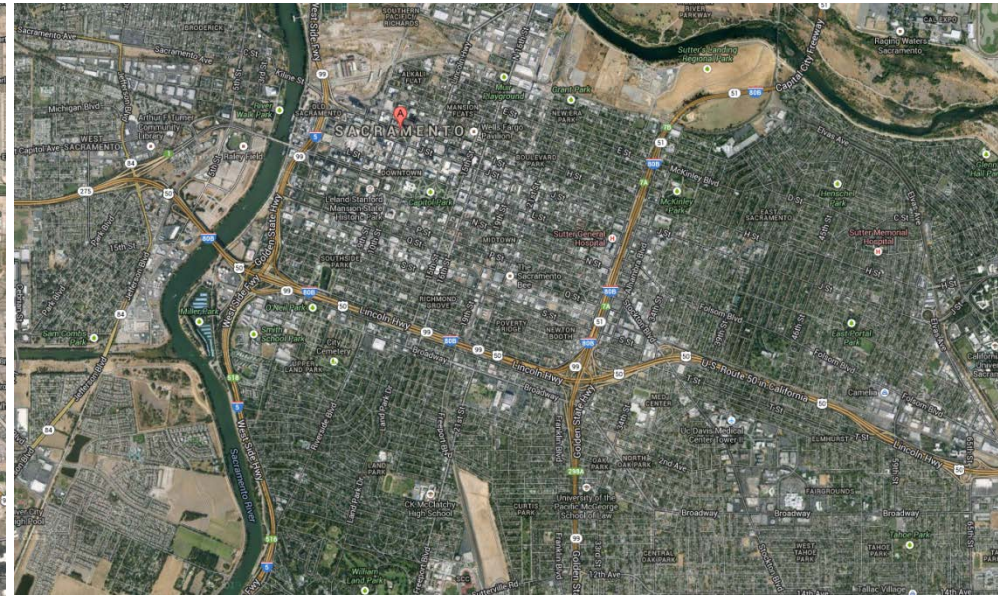
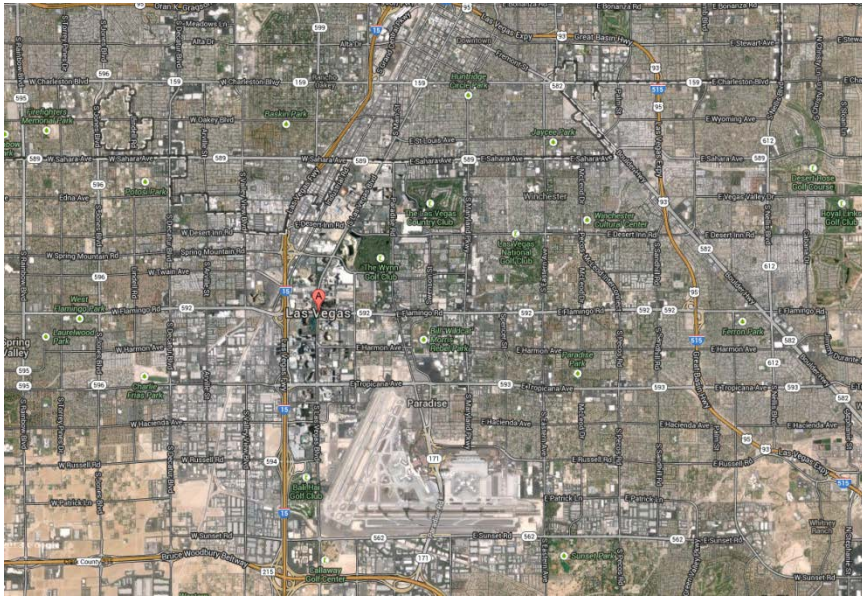
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Las Vegas Valley Growth in the 1990s and 2000s



Las Vegas, NV

Sacramento, CA



<https://maps.google.com>

<https://maps.google.com>

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Downtown Las Vegas



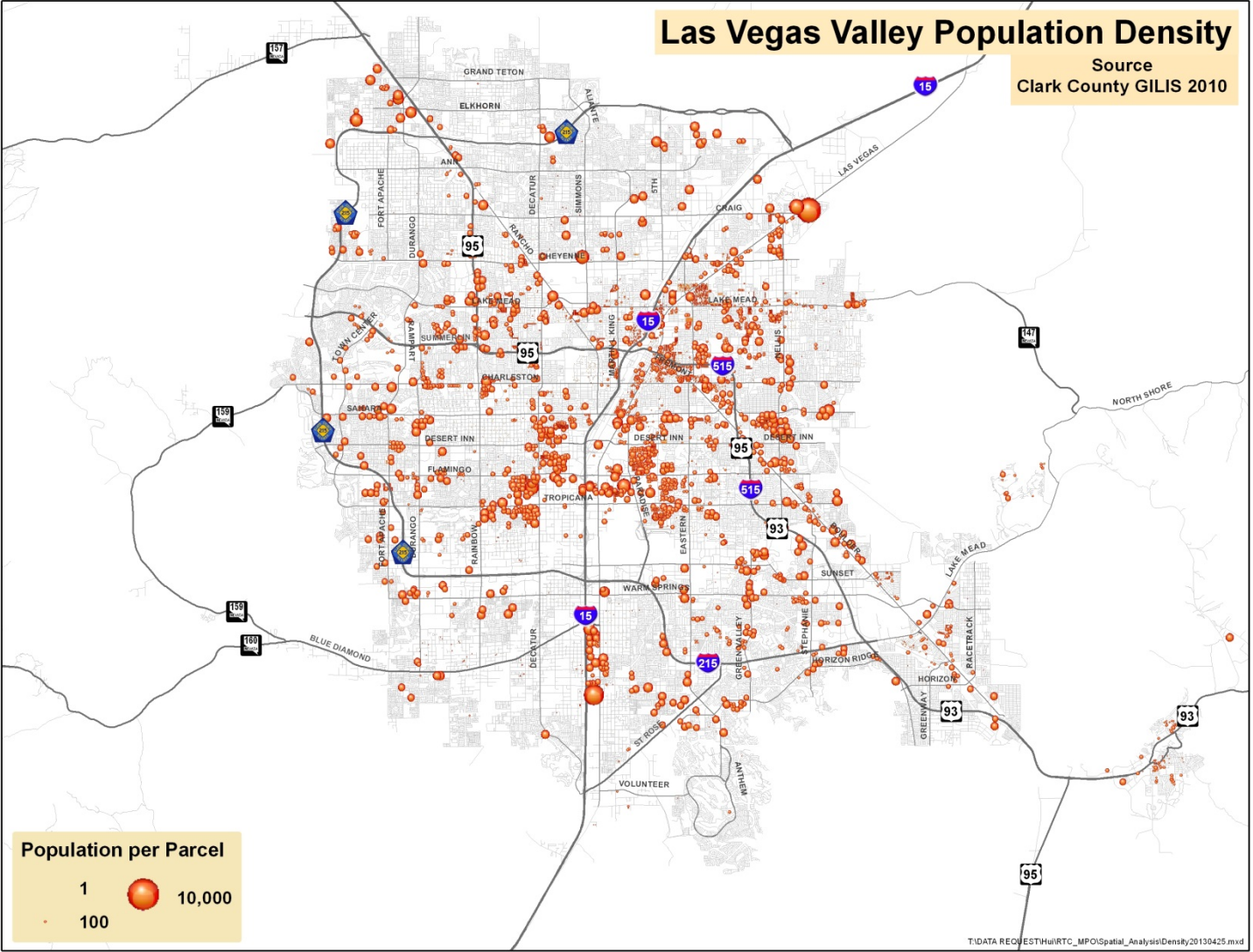
<http://johnkeys.com/2008/02/downtown>

Water Conservation

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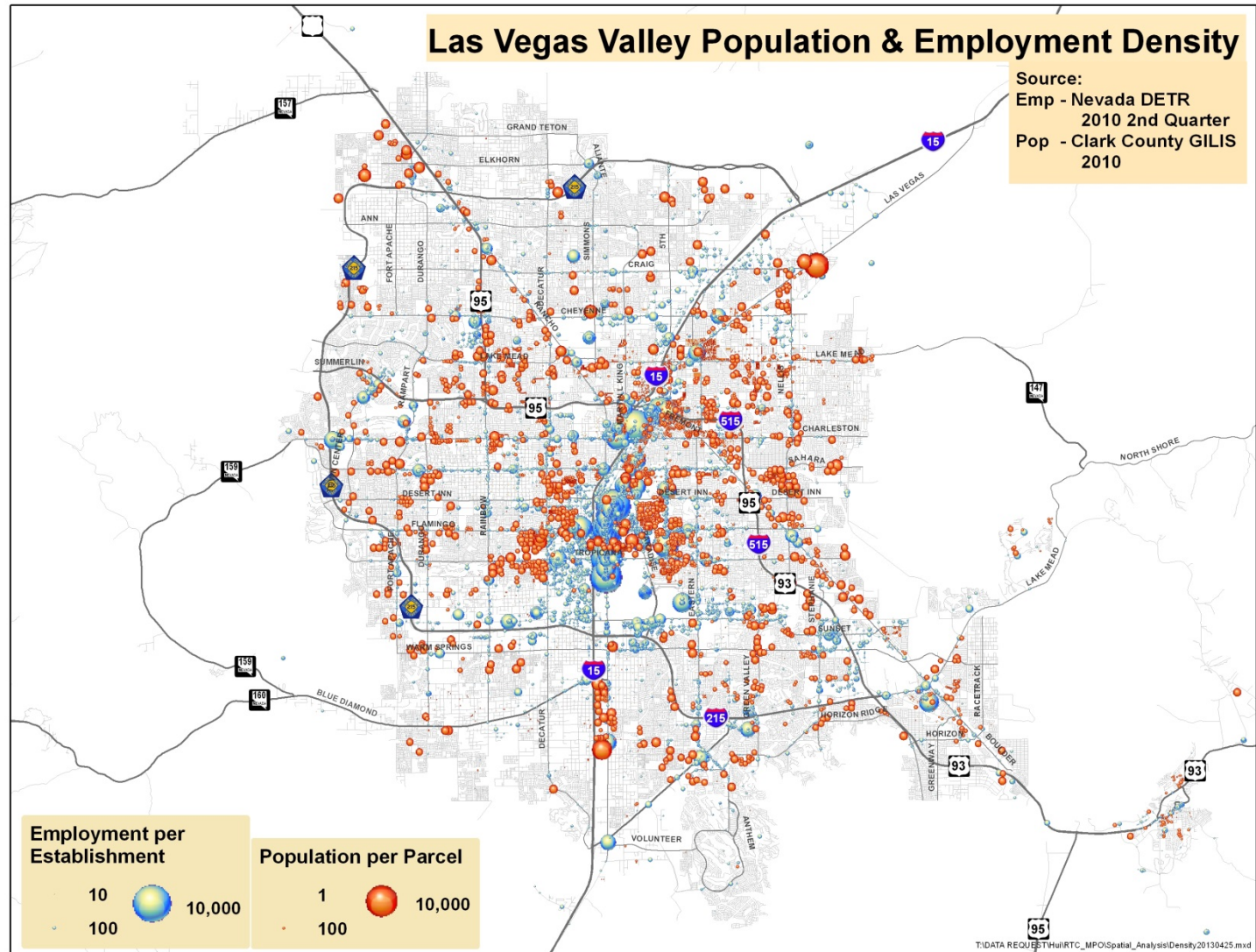
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Population Density



Courtesy of Clark County Regional Transportation Commission

Population and Employment Density



Courtesy of Clark County Regional Transportation Commission

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Tract Housing

City Center



<http://northlasvegashomes.wordpress.com/category/las-vegas-real-estate/summerlin-homes/>



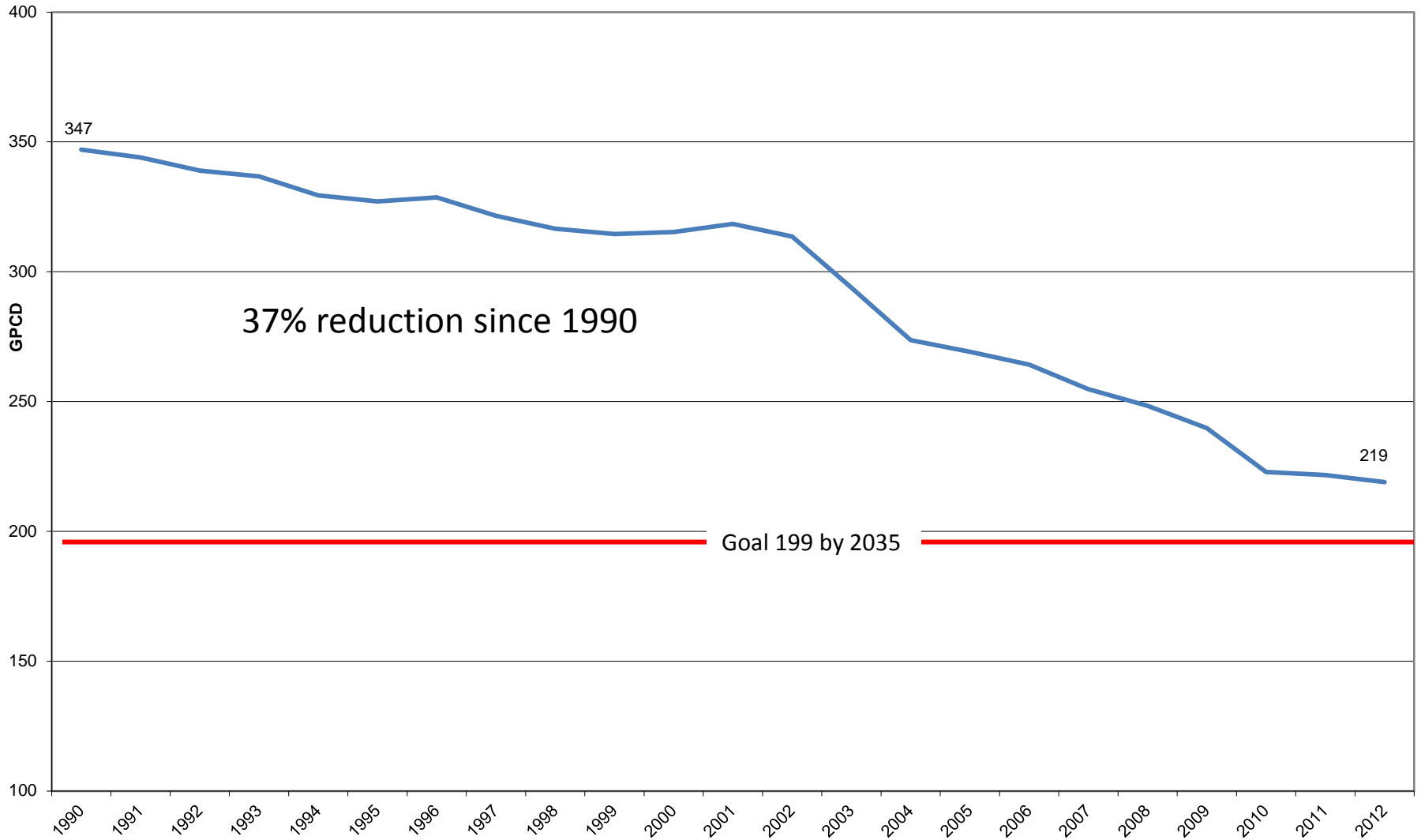
<http://www.pitchengine.com/kirvindoakcommunications/uniqueromanticvalentinesdavexperiencesinlasvegascitycenter>

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Reductions in Valley Water Usage



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Waste Water Treatment



http://www.pwmag.com/water/watchful-eye_2.aspx



http://www.pwmag.com/water/watchful-eye_2.aspx



<http://www.carollo.com/SouthernNevada-WaterSystemImprovements>

Outdoor Sprinklers



<http://www.garpiellandscaping.com/our-services/lawn-sprinklers>

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Lake Mead



<http://photobetties.org/2011/02/19/explore-off-beat-vegas/>

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Facing our Dilemmas



<http://www.perfectlaborstorm.com/tag/skilled-worker-shortages/>



<http://fresh-energy.org/2012/05/minnesota-department-of-commerce-recommends-shutting-down-and-replacing-minnesota-power%E2%80%99s-oldest-coal-plants/>



<http://photobetties.org/2011/02/19/explore-off-beat-vegas/>

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Solar Energy



<http://au.ibtimes.com/articles/296308/20120210/gillard-government-launches-340-million-energy-programme.htm#.UgV52JK1F8E>

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Photo-Voltaic Solar Panels



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Redevelopment



<http://www.tournorfolk.co.uk/holt.html>

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Hoboken, NJ



<http://www.city-data.com/businesses/605409267-eyebrow-place-hoboken-nj.html>

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Leap Frog Development



<http://persquaremile.com/2011/02/28/when-greenbelts-fail/>

Water Conservation

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San Francisco, CA



<http://www.sanfrancisco.net/>

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Live/Work/Play



<http://hendersonnvshortsaleagent.com/the-district/>



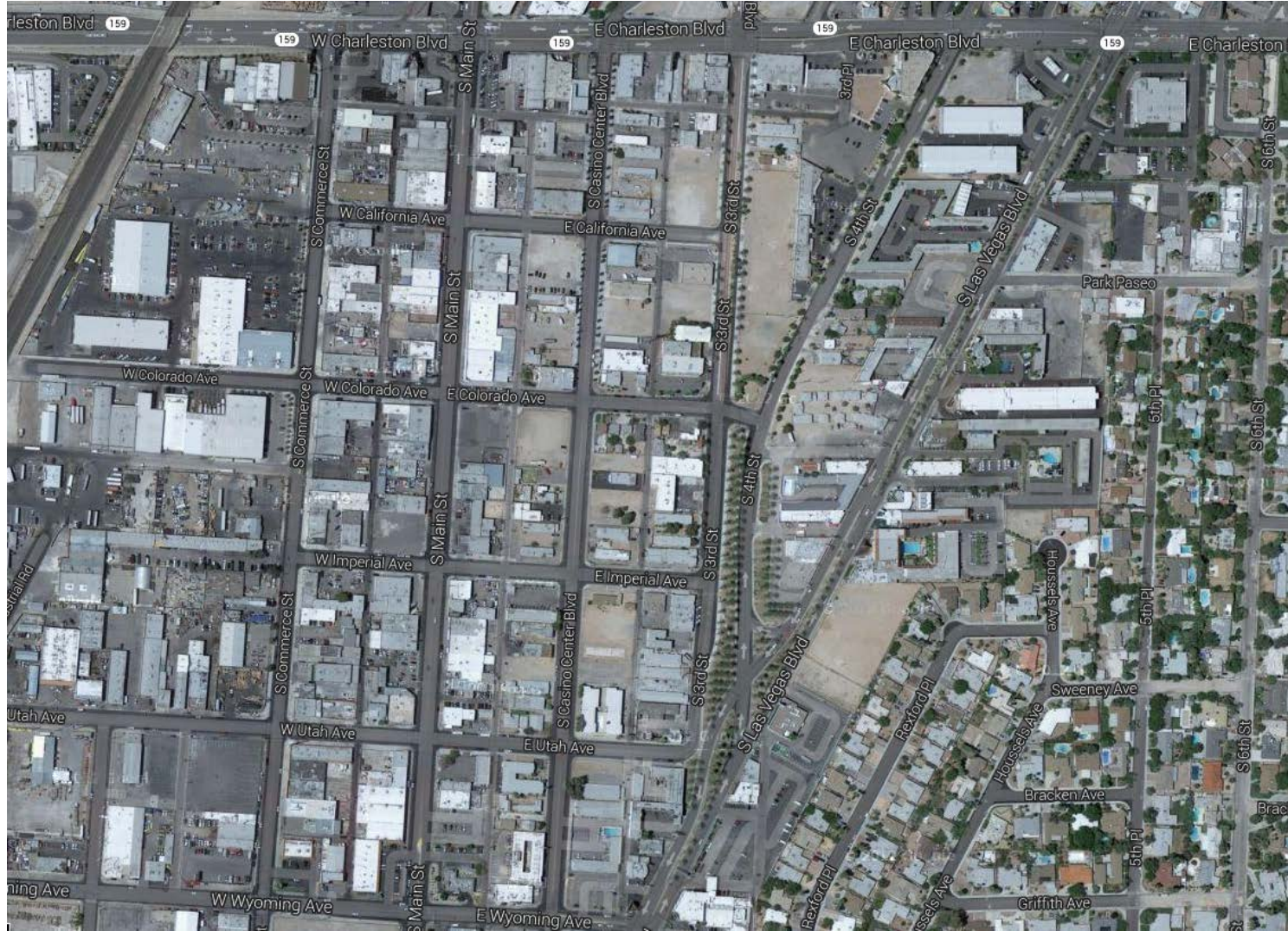
<http://www.skyscrapercity.com/archive/index.php/t-729182-p-3.html>

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Doubling Density



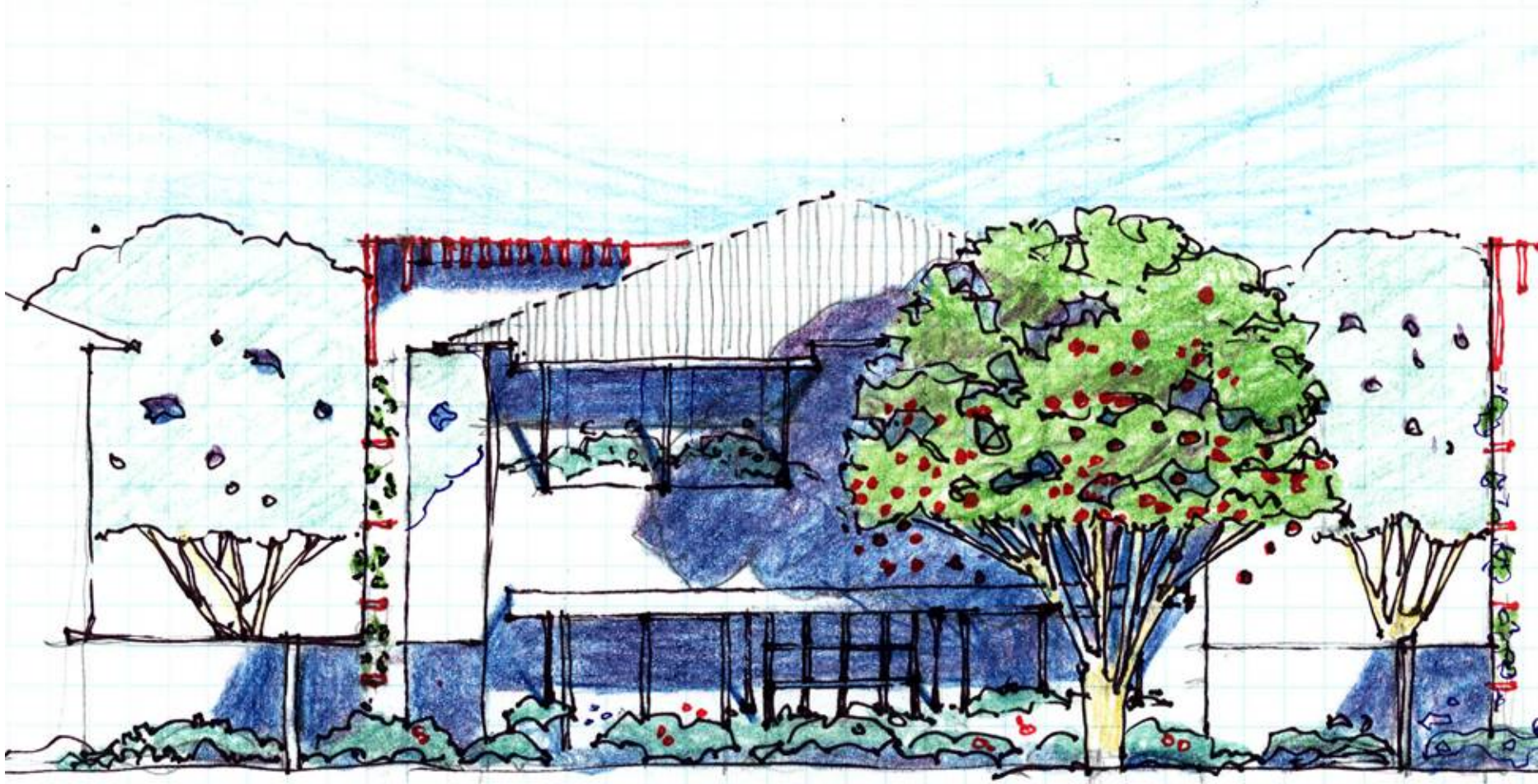
<https://maps.google.com>

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Shaded Walls



MAD, NEARBY, MALA
10/04

Water Conservation

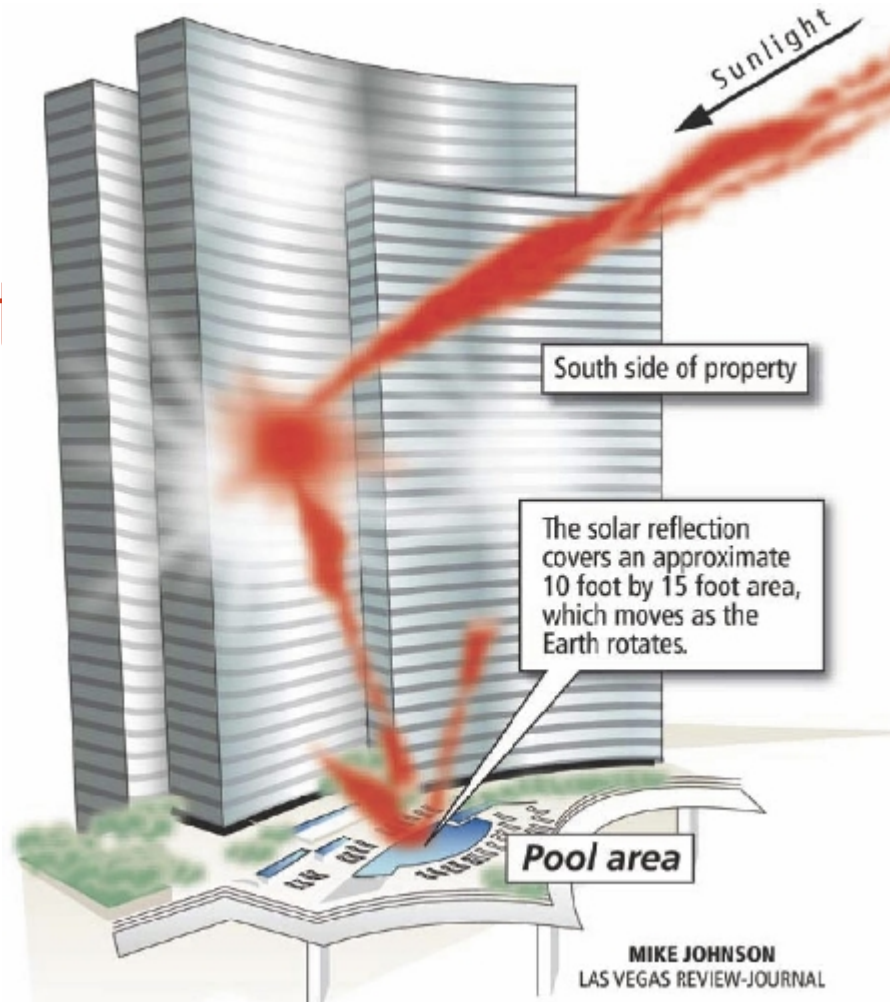
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Un-Shaded Walls

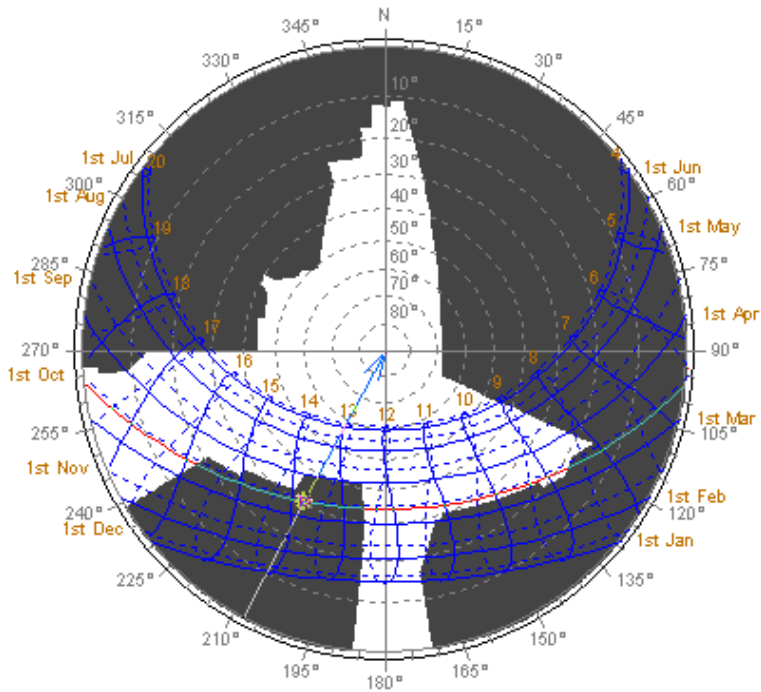


<http://kansascity.legalexaminer.com/defective-dangerous-products/vdara-hotel-knew-about-pool-death-ray-since-2008/>

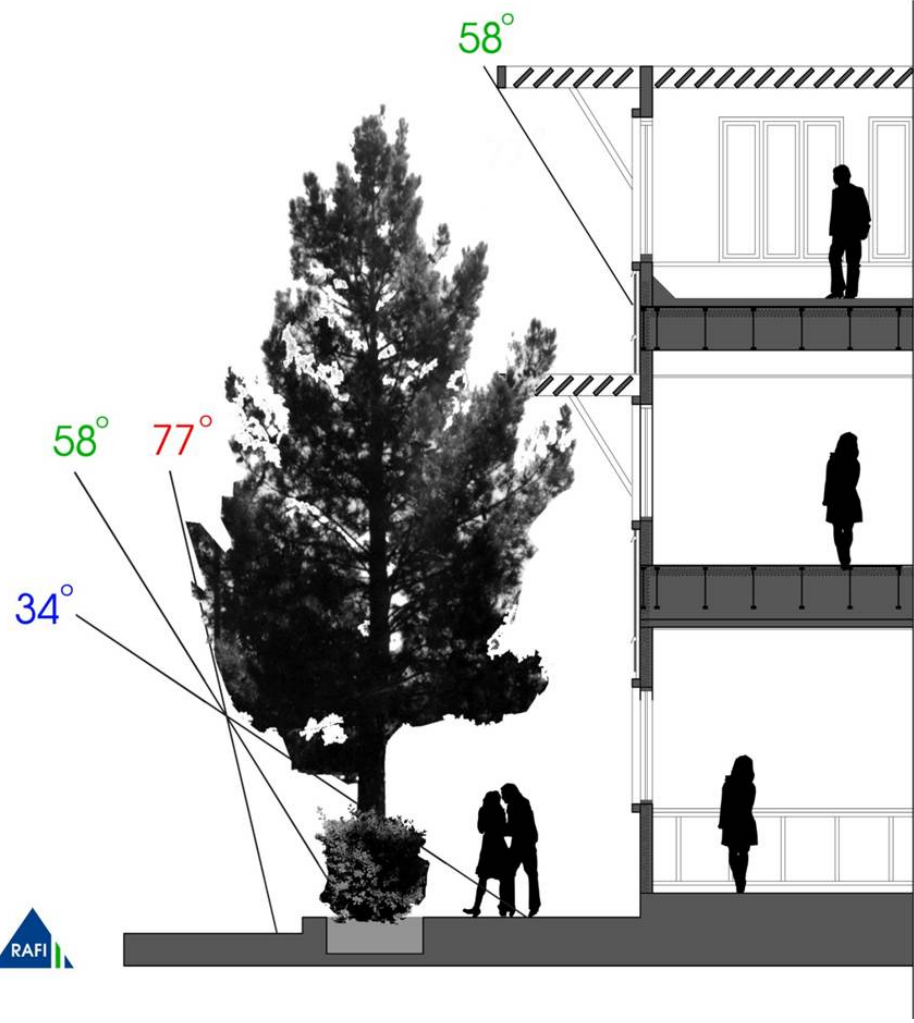


<http://www.reviewjournal.com/news/vdara-visitor-death-ray-scorched-hair>

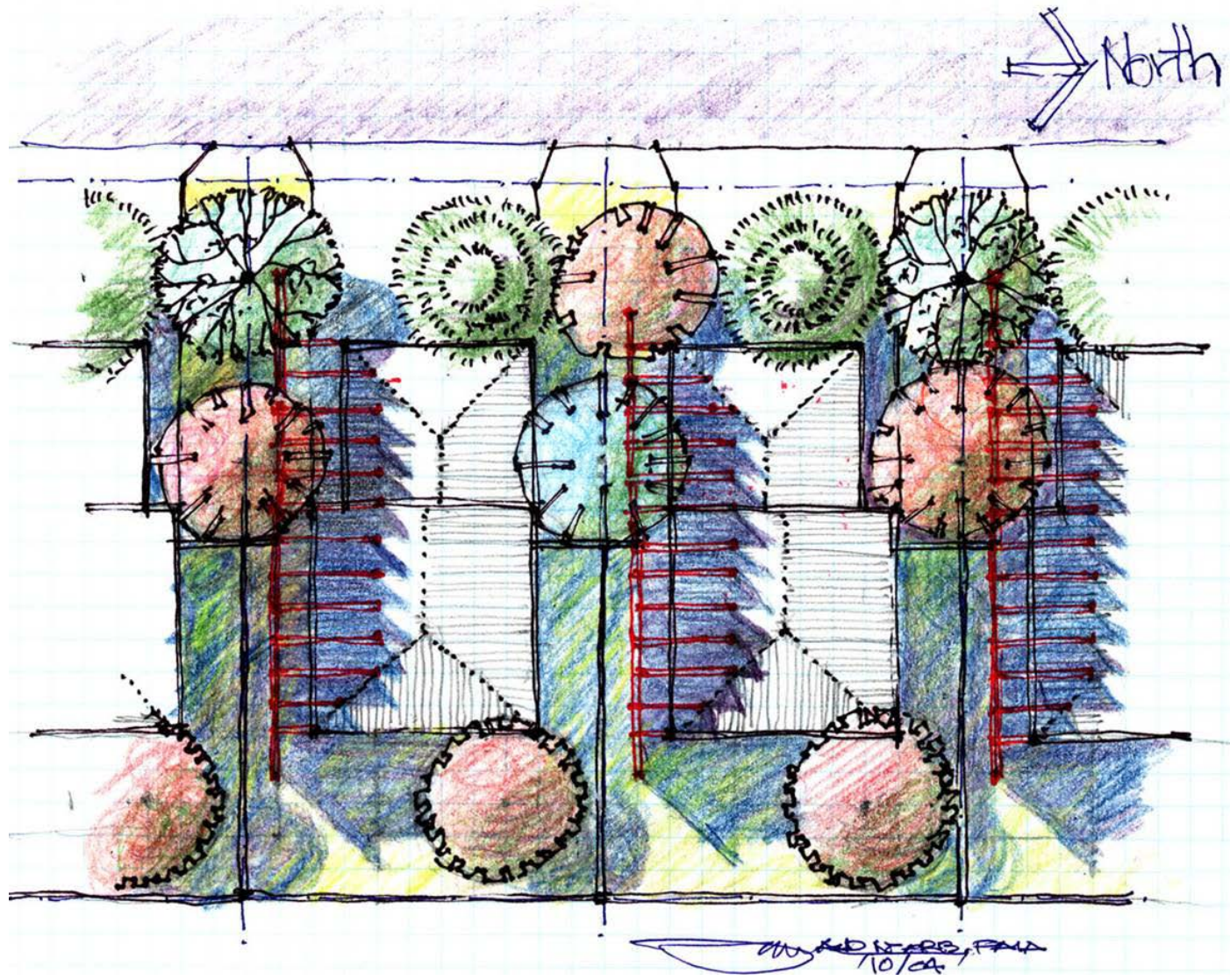
Shading



<http://wiki.naturalfrequency.com/wiki/Shading/Overshadowing>



Shading Roofs and Walls



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Floor/Wall and Roof Insulation

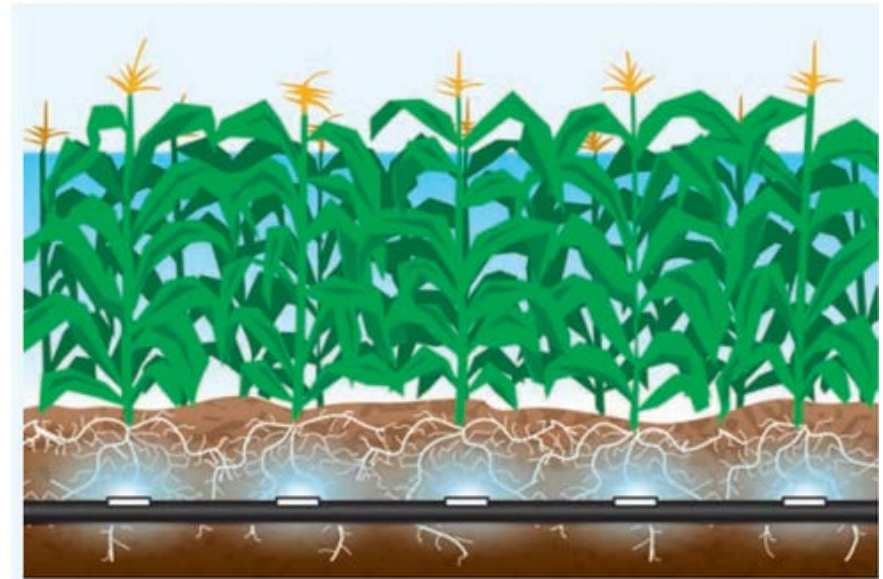


<http://waterworksvalley.com/ceiling-insulation-what-to-buy/>

Traditional vs. Underground Drip Irrigation Systems



<http://www.ic2.utexas.edu/global/tech-briefs/irrigation-system/>



Subsurface drip irrigation (SDI)

<http://www.southerndrip.com/resources/>

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Edible Plants and Flowers



<http://www.teichgardensystems.com/>

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Drought Tolerant Turfs



<http://georgialandscapenetwork.com/turf-grass/tifway-bermuda/>



<http://www.landscapesodandbeyond.com/landing-pages/ocala-bahia-grass/>

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http://commons.wikimedia.org/wiki/File:1_Las_vegas_strip.jpg

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Daily Visitors



<http://www.casinoguide.com/blogs/gambling/the-pro-bono-bookmaker/>

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Water Efficient Toilet and Showerhead

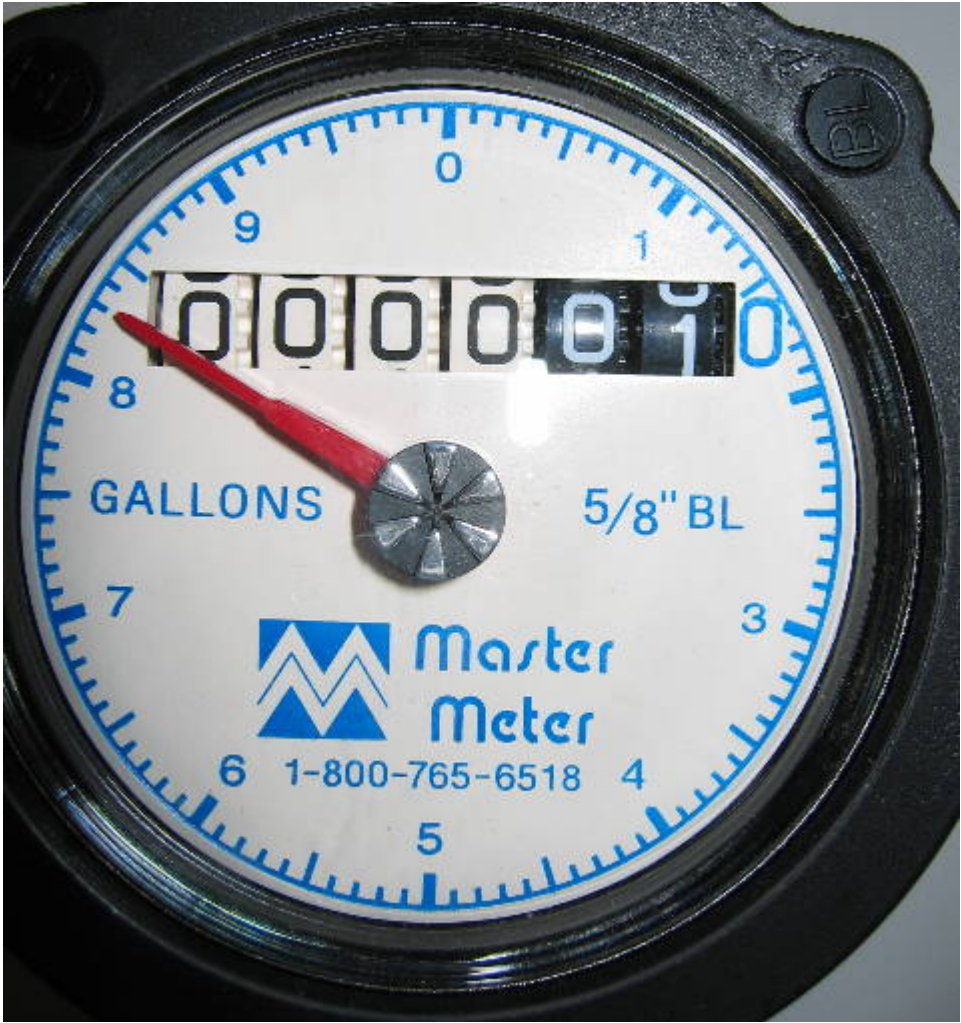


<http://www.ebmud.com/for-customers/for-residential-customers/conservation-rebates-and-incentives/high-efficiency-toilet-r>



<http://energy.gov/energysaver/articles/reduce-hot-water-use-energy-savings>

Smart Water-Meter



http://en.wikipedia.org/wiki/File:Water_meter_register.jpg

McMansions



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Thank You!

