

## Regional Green Stormwater Infrastructure Survey (Progress Report)

Sector	Entity	Type of Implementation	Specific GI/LID Effort	Date	Rainwater	Stormwater	Graywater	Native Plants/	Wildlife Corridors/	Green Jobs	Shade Trees	Curb Cuts	Urban Ecosystem	Groundwater	Sustainability	Brownfields	Riparian	Protection/	UHI Mitigation	Pervious Pavement	Wash Protection	Details	Contact Info	
					Harvesting	Harvesting	Harvesting	Xeriscaping	Habitat								Recharge		Restoration					
Gov. and Quasi-Gov.	City of South Tucson	Education	City of South Tucson Environmental Workplace Development and Job Training Program	December, 2011 (ongoing)		x								x	x							7-week course of intense education to prepare participants for a position in the environmental workforce, including training in stormwater management, sustainability, and site assessment. Funded by an EPA Brownfields Job Training Grant	Derek Koller: (520) 551-7887, dkoller@allwynenvironmental.com or Joel Gastelum: JGastelum@southtucson.org	
Gov. and Quasi-Gov.	City of South Tucson	Guideline	Growing Smarter Comprehensive Plan Update	2002				x		x												Includes objectives and strategies to convert vacant land into community gardens and encourage low-water-use tree planting	City of South Tucson Planning and Zoning ( <a href="http://www.southtucson.org/government/department-and-divisions/planning-and-zoning.html">http://www.southtucson.org/government/department-and-divisions/planning-and-zoning.html</a> )	
Gov. and Quasi-Gov.	City of South Tucson	Guideline	City of South Tucson Comprehensive Plan	1999				x														Includes strategies to incorporate xeriscape landscaping into future conversion of right-of-way into linear park	City of South Tucson Planning and Zoning ( <a href="http://www.southtucson.org/government/department-and-divisions/planning-and-zoning.html">http://www.southtucson.org/government/department-and-divisions/planning-and-zoning.html</a> )	
Gov. and Quasi-Gov.	City of Tucson	Guideline	Mayor Jonathan Rothschild's 180-day work plan	Dec-June, 2012	x	x	x			x												Gives priority to solar energy and water conservation, road design to minimize runoff and maximize recharge, and increasing low water use and native shade trees on city streets; goal to make Tucson an industry leader in solar power and water conservation	City of Tucson Mayor's Office ( <a href="http://cms3.tucsonaz.gov/home/announcement/mayors-180-day-status-report">http://cms3.tucsonaz.gov/home/announcement/mayors-180-day-status-report</a> )	
Gov. and Quasi-Gov.	City of Tucson	Guideline	Watercourse Preservation Resolution (#15269)	April, 1990		x		x	x			x					x				x	"The Mayor and Council find that protection and preservation of natural drainage systems should be the primary emphasis of City stormwater management efforts. Nonstructural solutions to flooding hazards shall be the preferred strategy over structural solutions."	City of Tucson Department of Transportation ( <a href="http://cms3.tucsonaz.gov/transportation/watercourse-preservation">http://cms3.tucsonaz.gov/transportation/watercourse-preservation</a> )	
Gov. and Quasi-Gov.	City of Tucson	Guideline	Landscape Advisory Committee	created in 1990				x		x		x										Advises Mayor and Council on the design, management, planning, and policy of Tucson's vegetation; includes a water conservation specialist on the 11-person committee	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/planning/news/committees/lac/index.html">http://cms3.tucsonaz.gov/planning/news/committees/lac/index.html</a> )	
Gov. and Quasi-Gov.	City of Tucson	Education	Urban Heat Island Workshops	2005		x				x											x	Annual workshop to educate City staff on the urban heat island and ways to mitigate its effects	City of Tucson, Irene Ogata ( <a href="mailto:Irene.Ogata@tucsonaz.gov">Irene.Ogata@tucsonaz.gov</a> )	
Gov. and Quasi-Gov.	City of Tucson	Guideline (if approved)	City of Tucson General Plan update (Green Infrastructure Element)	Will be taken to voters in Nov. 2013	x	x		x	x	x												x	Contains a Green Infrastructure Element that provides a mixture of requirements and guidelines for more fully implementing GI/LID practices across the city	City of Tucson Housing and Community Development Dept. ( <a href="http://cms3.tucsonaz.gov/plantucson">http://cms3.tucsonaz.gov/plantucson</a> ), ( <a href="http://cms3.tucsonaz.gov/sites/default/files/12minutes/green_infrastructure_final_working_document_021012.pdf">http://cms3.tucsonaz.gov/sites/default/files/12minutes/green_infrastructure_final_working_document_021012.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	Development Standard 9-06	Nov. 7, 2006				x	x			x										x	Creates a single process for review by incorporating Critical Riparian Habitat in ERZ watercourses "resource areas" in WASH watercourses, and riparian habitat within the undesignated regulatory floodplains into Protected Riparian Areas	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/files/dsd/DevStdTOC9.pdf">http://cms3.tucsonaz.gov/files/dsd/DevStdTOC9.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Guideline	Curb cut standards	cannot find date		x					x												Curb cuts are allowed by the City but require a permit, for which the City offers design guidelines	City of Tucson Department of Transportation ( <a href="http://cms3.tucsonaz.gov/transportation/stormwater-management">http://cms3.tucsonaz.gov/transportation/stormwater-management</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	Interim Watercourse Improvement Policy	June 27, 1988				x	x			x										x	Initial City direction for regulation of watercourses; contains specific policies that encourage the preservation of natural watercourses and the design of landscaped, natural-appearing channels; protects against disruption of wildlife movement corridors	City of Tucson Department of Transportation, City Engineer ( <a href="http://cms3.tucsonaz.gov/files/transportation/stormwater/Interim%20Watercourse%20Preservation%20Policy%20dated%20April%202022nd.pdf">http://cms3.tucsonaz.gov/files/transportation/stormwater/Interim%20Watercourse%20Preservation%20Policy%20dated%20April%202022nd.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation (if approved)	Mayor & Council approval of road design for water harvesting study	May 8, 2012		x		x		x	x		x										Mayor and Council directed staff to identify new road design technical standards that support the goals of water harvesting within 120 days (Sept. 2012) and to work with WMG on the development of a GI ordinance to promote the planting and growth of shade trees irrigated by stormwater in road construction and renovation projects	City of Tucson Mayor's Office ( <a href="http://cms3.tucsonaz.gov/mayor">http://cms3.tucsonaz.gov/mayor</a> ), ( <a href="http://www.tucsonaz.gov/sirepub/mtgviewer.aspx?meetid=922&amp;doctype=SUMMARY">http://www.tucsonaz.gov/sirepub/mtgviewer.aspx?meetid=922&amp;doctype=SUMMARY</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	Commercial Rainwater Harvesting Ordinance (#10597)	passed October 2008, in effect June 1, 2010	x	x		x			x												New commercial facilities must meet 50% of their landscape demand using harvested rainwater, prepare a site water harvesting plan and water budget, meter outdoor water use, and use irrigation controls that respond to soil moisture conditions at the site	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/files/agdocs/20081014/oct14-08-564a.pdf">http://cms3.tucsonaz.gov/files/agdocs/20081014/oct14-08-564a.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Guideline	City of Tucson Urban Landscape Framework (ULF)	March 4, 2008	x	x				x		x		x								x	Promotes sustainable urban landscapes, including through stormwater management and rainwater harvesting, increased green space (green infrastructure), preservation of natural washes, and prevention and mitigation of urban heat island effects	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/sites/default/files/planning/prog_proj/projects/urbanlandscape/cms1_030013.pdf">http://cms3.tucsonaz.gov/sites/default/files/planning/prog_proj/projects/urbanlandscape/cms1_030013.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	Native Plant Preservation Ordinance (NPP0)	?				x															Protects vegetation in upland areas of a site that meets species, caliper, and visibility criteria	
Gov. and Quasi-Gov.	City of Tucson	Guideline	Interim Watercourse Maintenance Guidelines	?							x											x	Provide general maintenance techniques for natural, altered from natural, and constructed watercourse classifications; in general the primary goal of maintenance is that vegetation which does not present a safety hazard or an obstruction to floodwaters should be preserved as-is	City of Tucson Department of Transportation ( <a href="http://cms3.tucsonaz.gov/files/transportation/stormwater/IWMG.pdf">http://cms3.tucsonaz.gov/files/transportation/stormwater/IWMG.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Guideline	Watercourse Amenities, Safety, And Habitat (WASH) Regulations "Guidelines"	May, 1998																		x	Provides guidance on requirements of Chapter 26 of the Tucson Code (Floodplain and Erosion Hazard Management) and WASH Regulations for habitat delineation and mitigation requirements; requires private and public development to prove necessity of riparian habitat alteration and provide mitigation measures	City of Tucson Department of Transportation ( <a href="http://cms3.tucsonaz.gov/files/transportation/stormwater/washguidetoM_C.pdf">http://cms3.tucsonaz.gov/files/transportation/stormwater/washguidetoM_C.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Guideline	City of Tucson Water Harvesting Guidance Manual	October, 2005	x	x		x															Provides illustrations, descriptions, designs, and equations of water harvesting practices for use by developers, engineers, designers, and contractors of commercial sites, public buildings, subdivisions, and public rights-of-way	City of Tucson Department of Transportation ( <a href="http://dot.ci.tucsonaz.us/stormwater/downloads/2006WaterHarvesting.pdf">http://dot.ci.tucsonaz.us/stormwater/downloads/2006WaterHarvesting.pdf</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	Watercourse Amenities, Safety, And Habitat (WASH) Regulations (Tucson Code Ch. 29)	March 25, 1991				x	x			x	x				x	x				x	Regulate development in "resource areas" along certain washes to protect existing vegetation, provide for restoration of vegetation along disturbed wash reaches, reduce urban heat island effects, and aid groundwater recharge; "resource areas" consist of vegetation and wildlife habitat located between wash banks and the land area extending 50' from either bank	City of Tucson Engineer ( <a href="http://cms3.tucsonaz.gov/transportation/wp-code-summary">http://cms3.tucsonaz.gov/transportation/wp-code-summary</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	Environmental Resource Zone (ERZ, Tucson Code Ch. 23)	July 3, 1990				x				x										x	Regulates development on parcels along specific washes that contain or may contain critical riparian habitat within the 100-year floodplain; preservation of 100% of this habitat is required with few exceptions	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/transportation/wp-code-summary">http://cms3.tucsonaz.gov/transportation/wp-code-summary</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	City of Tucson Xeriscape Landscaping and Screening Regulations (ordinance 7522)	February, 1991		x		x			x												Requires the use of drought-tolerant plants from a published list, with non-drought tolerant plants limited to small "oasis" zones. Also requires canopy trees within buffer yards, along street frontages, and in parking lots every 15 spaces. Landscape areas must be designed to take advantage of stormwater runoff	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/water/ord-7522">http://cms3.tucsonaz.gov/water/ord-7522</a> )
Gov. and Quasi-Gov.	City of Tucson	Regulation	City of Tucson Land Use Code	2001		x							x										Several different sections support GI/LID, through requirements that landscaping accomplish energy, water, and other natural resource conservation, slow stormwater runoff, and assist in groundwater recharge; that site plans make maximum use of site stormwater runoff to supplement site irrigation needs; and that irrigation systems for new plantings and preserved vegetation include stormwater runoff for supplemental irrigation	City of Tucson Planning and Development Services ( <a href="http://cms3.tucsonaz.gov/planning/codes/luc/">http://cms3.tucsonaz.gov/planning/codes/luc/</a> )

Sector	Entity	Type of Implementation	Specific GI/LID Effort	Date																Details	Contact Info	
					Rainwater Harvesting	Stormwater Harvesting	Graywater Harvesting	Native Plants/ Xeriscaping	Wildlife Corridors/Habitat	Green Jobs	Shade Trees	Curb Cuts	Urban Ecosystem (Services)	Groundwater Recharge	Sustainability	Brownfields	Riparian Protection/Restoration	UHI Mitigation	Pervious Pavement			Wash Protection
Gov. and Quasi-Gov.	City of Tucson	Demonstration	Rainwater Harvesting at COT Ward Council Offices	summer 2007 - 2012	x	x		x			x	x									Various water harvesting and green infrastructure practices installed at Ward I, II, III, and IV council offices in partnership with Watershed Management Group and others. Ward II site promotes COT's commercial rainwater harvesting ordinance	Ward websites; summary on WMG website ( <a href="http://watershedmg.org/demo-sites/tucson">http://watershedmg.org/demo-sites/tucson</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Sustainable Action Plan for County Operations	August, 2008	x	x	x	x	x	x					x	x				x	Supports Resolution No. 2007-84 by outlining sustainability goals, guiding principles, 5-year action plans, and success indicators for the 7 target areas set forth in the resolution; includes many components of LID/GI to meet sustainability targets	Pima County ( <a href="http://www.pima.gov/sustainable/aug08actionplan-1.pdf">http://www.pima.gov/sustainable/aug08actionplan-1.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Flood Control LID Working Group	2011-ongoing		x				x	x	x								x	The LID working group continues to work to develop an arid-adapted LID manual for use by the development community. This group is also creating an "in-ground" case studies catalog of LID examples from around Pima County.	Evan Canfield ( <a href="http://rfcd.pima.gov/pdd/lid/workinggroup.htm">http://rfcd.pima.gov/pdd/lid/workinggroup.htm</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Pima County Green Remodeling Guide	May 16, 2008	x	x	x	x													Guidance document for homeowners/builders wishing to participate in the Pima County Regional Residential Green Remodeling Program; allows points for various water harvesting practices and use of shade trees for energy efficiency	Pima County Development Services Building Safety & Sustainability Division ( <a href="http://www.pimaxpress.com/Documents/Green/PC%20Regional%20Residential%20Green%20Remodeling%20Standard.pdf">http://www.pimaxpress.com/Documents/Green/PC%20Regional%20Residential%20Green%20Remodeling%20Standard.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Regulation	Conservation Land System	Adopted Dec., 2001, updated June 21, 2005				x	x											x	Identifies seven conservation land categories, including Important Riparian Areas (IRAs), with a guideline of at least 95% of the total acreage of land within that designation conserved in a natural or undisturbed condition; restoration or enhancement of previously disturbed IRAs may contribute to achieving the 95% conservation guideline	Pima County Development Services ( <a href="http://www.pimaxpress.com/Documents/Planning/ComprehensivePlan/PDF/CLS/CLS_Adopted_Policy.pdf">http://www.pimaxpress.com/Documents/Planning/ComprehensivePlan/PDF/CLS/CLS_Adopted_Policy.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Sonoran Desert Conservation Plan	2001		x		x	x											x	Integrates all natural resource protection and land use planning activities into one plan. It includes measures to conserve riparian areas to protect plants and wildlife, maintain recreational trails, promote groundwater recharge, protect water quality, and attenuate flooding. Strategies to do so include harvesting stormwater runoff	Pima County Administrator's Office ( <a href="http://www.pima.gov/cmo/sdcp/index.html">http://www.pima.gov/cmo/sdcp/index.html</a> )
Gov. and Quasi-Gov.	Pima County	Regulation	Pima County Native Plant Preservation Ordinance	?				x													Intended to preserve plants and plant communities that are native to Pima County	
Gov. and Quasi-Gov.	Pima County	Demonstration	Pima County Regional Optimization Master Plan (ROMP)	November, 2007	x	x		x												x	Master plan includes water harvesting, natural open space, and other elements to showcase Pima County's commitment to sustainability	Pima County Regional Wastewater Reclamation Department ( <a href="http://www.pima.gov/wwm/programs/ROMP/">http://www.pima.gov/wwm/programs/ROMP/</a> )
Gov. and Quasi-Gov.	Pima County	Regulation	Riparian Protection Ordinance (Watercourse and Riparian Habitat Protection and Mitigation Requirements)	July 19, 1994 (original adoption date), June 3, 2010 (most recent amendment)	x	x		x	x											x	Outlines Regulated Riparian Habitat (RRH), any disturbance of which requires Flood Control review and approval, while for disturbance greater than 1/3 acre requires a Riparian Habitat Mitigation Plan (RHMP); promotes stable flow and sediment transport conditions, preserves natural floodplain functions, and provides watercourse management by preserving and/or enhancing riparian vegetation and habitat along water courses and floodplains	Pima County Regional Flood Control District ( <a href="http://rfcd.pima.gov/wrd/riparian/guidelines/pdfs/onsite-guidelines.pdf">http://rfcd.pima.gov/wrd/riparian/guidelines/pdfs/onsite-guidelines.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Demonstration (if approved)	Avra Riparian Restoration and Groundwater Replenishment Project	March, 2007 (introduced to US House)					x												Proposed project would use additional effluent produced by an upgrade to the Pima County Avra Valley Wastewater Treatment Facility to recharge the aquifer and enhance existing riparian habitat and create recreational and wildlife viewing opportunities	Pima County Regional Flood Control District ( <a href="http://rfcd.pima.gov/projects/avrariarian/pdfs/avrariarian.pdf">http://rfcd.pima.gov/projects/avrariarian/pdfs/avrariarian.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Regulation	Conservation Subdivision Ordinance	Revised June, 2007 (originally 2001?)		x		x	x											x	Protects sensitive conservation features by encouraging the planning of residential subdivisions in harmony with natural features; includes a provision that site development shall include reduction of stormwater runoff by means of water harvesting and other LID/GI practices	Pima County Development Services ( <a href="http://www.pimaxpress.com/documents/Manuals/Cons_Sub.pdf">http://www.pimaxpress.com/documents/Manuals/Cons_Sub.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Pima County Native Plant Preservation Manual	June 2, 1998				x													Provides standards and procedures for implementing requirements of the Pima County Native Plant Preservation Ordinance	Pima County Development Services Planning Division ( <a href="http://www.pimaxpress.com/planning/PDFs/NPP/NPPO_Manual.pdf">http://www.pimaxpress.com/planning/PDFs/NPP/NPPO_Manual.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Pima County Comprehensive Plan Water Resources Element Amendment (2008-72)	April 1, 2008	x	x		x												x	Requires applicants of rezoning to consider means of reducing water demand through measures including rainwater/stormwater harvesting, use of native vegetation, and minimization of impervious surfaces, with a goal of mitigating increased water demand for rezoning approvals. Also allows Pima County to maximize use of rainfall and runoff, among other water resources, and utilize stormwater for riparian restoration	Pima County Development Services ( <a href="http://www.tucsonpimawaterstudy.com/BOS_CC/Co7-07-04%20BOS%20signed%20resolution.pdf">http://www.tucsonpimawaterstudy.com/BOS_CC/Co7-07-04%20BOS%20signed%20resolution.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Regulation	Stormwater Detention/Retention Manual revision (currently in draft form)	expected 2012		x		x												x	Requires the use of LID practices to capture and retain the first flush volume of runoff (first 0.5 inches of rain) from impervious or disturbed areas; Allows for design of selected GI/LID practices for flood control as a reduction in the required volume of detention facilities	Pima County Regional Flood Control District ( <a href="http://rfcd.pima.gov/rules/stormwater.cfm">http://rfcd.pima.gov/rules/stormwater.cfm</a> )
Gov. and Quasi-Gov.	Pima County	Guideline	Resolution No. 2007-84	May 1, 2007			x	x												x	Supports and requires sustainable development practices within Pima County, including several components of GI/LID	Pima County ( <a href="http://www.pimaxpress.com/documents/green/Sustainability_Resolution.pdf">http://www.pimaxpress.com/documents/green/Sustainability_Resolution.pdf</a> )
Gov. and Quasi-Gov.	Pima County	Implementation	Kino Environmental Restoration Project	November, 2001 (completed); authorized 1999		x		x	x												This project upgraded an existing detention basin and incorporated environmental restoration, riparian habitat protection, and stormwater harvesting while maintaining flood control benefits	Pima County Regional Flood Control District ( <a href="http://rfcd.pima.gov/projects/kerp/pdfs/kerp.pdf">http://rfcd.pima.gov/projects/kerp/pdfs/kerp.pdf</a> )

Sector	Entity	Type of Implementation	Specific GI/LID Effort	Date															Details	Contact Info
					Rainwater Harvesting	Stormwater Harvesting	Graywater Harvesting	Native Plants/ Xeriscaping	Wildlife Corridors/Habitat	Green Jobs	Shade Trees	Curb Cuts	Urban Ecosystem (Services)	Groundwater Recharge	Sustainability	Brownfields	Riparian Protection/Restoration	UHI Mitigation		
Gov. and Quasi-Gov.	Town of Marana	Demonstration (if approved)	Tres Rios del Norte Environmental Restoration Study	September, 2001-ongoing		x		x	x				x	x				x	Analyzes the potential to restore and enhance native vegetation and riparian habitat within and along an 18-mile stretch of the Santa Cruz, also considering recreational, cultural, groundwater recharge, and flood damage reduction benefits	Town of Marana Environmental Engineering Division ( <a href="http://marana.com/index.aspx?nid=358">http://marana.com/index.aspx?nid=358</a> )
Gov. and Quasi-Gov.	Town of Marana	Guideline	Marana Parks, Recreation, Trails and Open Space Master Plan	October 5, 2010		x		x	x					x	x			x	Characterizes the Town's parks and open spaces as Ecological Assets and components of green infrastructure with goals to develop parks and rec facilities that integrate with natural processes and systems and deliver social, economic, and environmental benefits	Town of Marana Parks and Recreation Department ( <a href="http://marana.com/index.aspx?nid=848">http://marana.com/index.aspx?nid=848</a> )
Gov. and Quasi-Gov.	Town of Marana	Regulation	Land Development Code: Native Plant Protection	October, 2001				x											Protects native vegetation as an important soil stabilizer, provider of food and security for desert wildlife, and a drought-tolerant form of landscaping	Town of Marana Planning Department ( <a href="http://www.marana.com/DocumentCenter/Home/View/281">http://www.marana.com/DocumentCenter/Home/View/281</a> )
Gov. and Quasi-Gov.	Town of Marana	Regulation	Landscape Development Code: Environmental Resource Zone	October, 2001				x	x									x	Provides for the protection and preservation of unique and significant ridges, peaks, riparian areas, wildlife corridors, rock outcroppings, and areas of significant vegetation; sites must produce a Site Resource Inventory and maintain biological linkages between existing wildlife and riparian corridors and protect them during and after development	Town of Marana Planning Department ( <a href="http://www.marana.com/DocumentCenter/Home/View/281">http://www.marana.com/DocumentCenter/Home/View/281</a> )
Gov. and Quasi-Gov.	Town of Marana	Guideline	Marana General Plan	December 7, 2010 (ratified May 17, 2011)	x	x	x	x	x					x				x	References the Open Space Master Plan and Habitat Conservation Plan to emphasize the importance of maintaining and enhancing the Town's Green Infrastructure; water resources element encourages water harvesting to promote conservation of potable water; energy element promotes the use of permeable paving to mitigate the UHI effect	Marana Mayor and Council ( <a href="http://www.marana.com/index.aspx?nid=927">http://www.marana.com/index.aspx?nid=927</a> )
Gov. and Quasi-Gov.	Town of Marana	Regulation	Land Development Code: Landscape Requirements	October, 2001		x		x										x	Requires the use of low water use/drought-tolerant plants for landscaping, with an exception for small oasis zones of 2.5-5% of the site area; requires the maximum use of site stormwater runoff for irrigation; provides for the use of shade trees in off-street parking areas, with requirements for 40% shading of asphalt within 5 years of plant installation	Town of Marana Planning Department ( <a href="http://www.marana.com/DocumentCenter/Home/View/281">http://www.marana.com/DocumentCenter/Home/View/281</a> )
Gov. and Quasi-Gov.	Town of Oro Valley	Regulation	Environmentally Sensitive Lands Ordinance	February 16, 2011				x	x					x				x	Conserves natural, scenic, hillside, and cultural resources by identifying resource areas and applying percent open space requirements for development within them; provides protection for wildlife corridors and native plants, and preserves the erosion control, water quality, and flood moderation functions of riparian areas	Town of Oro Valley Development and Infrastructure Services ( <a href="http://orovalley.granicus.com/MetaViewer.php?meta_id=86606&amp;view=&amp;showpdf=1">http://orovalley.granicus.com/MetaViewer.php?meta_id=86606&amp;view=&amp;showpdf=1</a> )
Gov. and Quasi-Gov.	Town of Oro Valley	Guideline	Green Team	October, 2009 (ongoing)	x	x		x										x	Consists of members from various Town jurisdictions that work together to develop and implement a sustainability action plan, including increasing the use of pervious material on roads and parking lots, maintaining and protecting riparian areas to help avoid the use of artificial drainageways, and encouraging flood control projects that have multiple benefits	Town of Oro Valley Development and Infrastructure Services ( <a href="http://www.orovalleyaz.gov/Assets/_assets/DIS/Conservation+and+Sustainability/Sustainability+Plan+October+2009.pdf">http://www.orovalleyaz.gov/Assets/_assets/DIS/Conservation+and+Sustainability/Sustainability+Plan+October+2009.pdf</a> )
Gov. and Quasi-Gov.	Town of Oro Valley	Regulation	Town of Oro Valley Stormwater Utility Ordinance	September 3, 2008		x												x	Establishes a Stormwater Utility that charges stormwater fees to all properties within the Town- a flat rate for single-family residences, and a rate based on amount of impervious surface to others. Fees are used to support the stormwater utility and implement the stormwater management plan, which includes BMPs	Town of Oro Valley Stormwater Utility ( <a href="http://www.codepublishing.com/az/orovalley/towncode/orovalley15/orovalley1524.html#15-24">http://www.codepublishing.com/az/orovalley/towncode/orovalley15/orovalley1524.html#15-24</a> )
Gov. and Quasi-Gov.	Town of Oro Valley	Guideline	Oro Valley General Plan	June 15, 2005	x	x		x	x					x	x			x	Includes provisions to minimize impacts to environmentally sensitive areas, natural open space, riparian areas, and washes; provides for protection of lands with aquifer recharge capacity and habitat connectivity; promotes water harvesting as a conservation technique	Town of Oro Valley Planning Division ( <a href="http://www.orovalleyaz.gov/Assets/_assets/DIS/Planning/pdf/General+Plan+2005.pdf">http://www.orovalleyaz.gov/Assets/_assets/DIS/Planning/pdf/General+Plan+2005.pdf</a> )
Gov. and Quasi-Gov.	Town of Oro Valley	Regulation	Town of Oro Valley Landscape Conservation Code	2010 (?)	x	x		x										x	Restricts commercial and residential subdivision bufferyards plantings to native Sonoran and Chihuahuan species; requires that irrigation to bufferyards and ROWs be turned off after a 5-year establishment period; requires subdivision common areas and commercial sites to reduce their water budgets by 50% after a 5-year establishment period, these sites must also harvest water at an amount equal to the difference in runoff between pre- and post-development	Town of Oro Valley Development and Infrastructure Services ( <a href="http://www.orovalleyaz.gov/Assets/_assets/DIS/Conservation+and+Sustainability/Landscape+Code.pdf">http://www.orovalleyaz.gov/Assets/_assets/DIS/Conservation+and+Sustainability/Landscape+Code.pdf</a> )
Gov. and Quasi-Gov.	Town of Sahuarita	Guideline (if approved)	Santa Cruz River Corridor District (Sahuarita Town Center and Santa Cruz River Corridor Subarea Plan)	January 14, 2008	x			x										x	Calls for the minimization of negative impacts from impervious surface area and urban runoff on the river channel and water quality, promotes water conservation through the use of native and xeric plant materials, encourages incentivizing water harvesting, requires shade trees in parking lots, and the utilization/restoration of washes as multi-modal corridors	Town of Sahuarita Planning and Building Department ( <a href="http://www.ci.sahuarita.az.us/phocadownload/plans/Sahuarita_TC_Plan.pdf">http://www.ci.sahuarita.az.us/phocadownload/plans/Sahuarita_TC_Plan.pdf</a> )
Gov. and Quasi-Gov.	Town of Sahuarita	Guideline	Madera Highlands Specific Plan	November, 1999					x									x	Includes a goal of utilizing existing drainageways (washes) as a community amenity for recreation, open space, habitat preservation, and neighborhood linkage	Town of Sahuarita Planning and Building Department ( <a href="http://www.ci.sahuarita.az.us/phocadownload/plans/madera-highlands-specific-plan.pdf">http://www.ci.sahuarita.az.us/phocadownload/plans/madera-highlands-specific-plan.pdf</a> )
Gov. and Quasi-Gov.	Town of Sahuarita	Guideline	Environmental Element of the Town of Sahuarita General Plan (2002)	May 20, 2003 (ratified)	x	x		x	x									x	Requires buffer areas between development and the Santa Cruz River and washes to preserve riparian areas and wash corridors, encourages shading as an energy conservation method, and promotes the use of water harvesting and xeriscaping to conserve water used for irrigation	Town of Sahuarita Planning and Building Department ( <a href="http://www.ci.sahuarita.az.us/phocadownload/plans/general-plan.pdf">http://www.ci.sahuarita.az.us/phocadownload/plans/general-plan.pdf</a> )
Gov. and Quasi-Gov.	Town of Sahuarita	Implementation	Water Harvesting in Parks		x	x												x	Sahuarita Parks Department harvests storm water at both North Santa Cruz and Quail Creek-Veterans Municipal Parks to irrigate the trees and shrubs planted in the parking lot medians. Additionally storm water is harvested to assist in the filling of Sahuarita Lake from the run off on the west side of the facility	Town of Sahuarita Parks and Recreation Department ( <a href="http://ci.sahuarita.az.us/index.php/town-departments/parks-a-recreation">http://ci.sahuarita.az.us/index.php/town-departments/parks-a-recreation</a> ); Brian De Breceny (bdebreceny@ci.sahuarita.az.us)
Gov. and Quasi-Gov.	Town of Sahuarita	Guideline	Sahuarita Farms River Master Plan Report	April, 2012		x		x	x					x	x			x	The River Master Plan treats the river as an amenity and provides an opportunity to mitigate threats to the river while providing flood storage, passive and active recreational use, habitat reestablishment, wetland/natural recharge, and connectivity	Town of Sahuarita Planning and Building Department ( <a href="http://www.ci.sahuarita.az.us/PDFs/FICO_RMP_FINAL.pdf">http://www.ci.sahuarita.az.us/PDFs/FICO_RMP_FINAL.pdf</a> )
Gov. and Quasi-Gov.	ADOT	Guideline	Guidelines for Long-Range Planning	2008, supplement October 17, 2011				x	x									x	Guidelines for highways on BLM and Forest Service Lands that include habitat connectivity measures and preservation and restoration of native vegetation as part of the "Context Sensitive Solutions"	ADOT Roadside Development ( <a href="http://www.azdot.gov/Highways/Roadway_Engineering/Roadside_Development/HwyBLM_USFS.asp">http://www.azdot.gov/Highways/Roadway_Engineering/Roadside_Development/HwyBLM_USFS.asp</a> )
Gov. and Quasi-Gov.	ADOT	Guideline	Building a Quality Arizona (Framework Policy Committee)	April, 2009 (ongoing)				x						x	x			x	Statewide transportation planning framework includes guidelines to ensure that green infrastructure is considered an integral component of transportation system development	Building a Quality Arizona ( <a href="http://www.bqaz.gov/PDF/2009_04_15_Policy_Committee.pdf">http://www.bqaz.gov/PDF/2009_04_15_Policy_Committee.pdf</a> ), ( <a href="http://www.bqaz.org/">http://www.bqaz.org/</a> )

Sector	Entity	Type of Implementation	Specific GI/LID Effort	Date																Details	Contact Info			
					Rainwater Harvesting	Stormwater Harvesting	Greywater Harvesting	Native Plants/Landscaping	Wildlife Corridors/Habitat	Green Jobs	Shade Trees	Curbs Cuts	Urban Ecosystems (Services)	Groundwater Recharge	Sustainability	Brownfields	Riparian Protection/Restoration	UHI Mitigation	Pervious Pavement			Wash Protection		
Non-Profit	Tohono Chul	Education	Visitor's Guide and Sin Agua Garden	2001 (addition of Sin Agua Garden)	x	x		x	x		x							x					Garden visitor guide describes various water harvesting practices on the grounds, including cisterns and a rain garden that harvests runoff from a parking lot; the importance of native plant species and wildlife habitat is also emphasized	Tohono Chul Park ( <a href="http://www.tohonochulpark.org/wordpress/">http://www.tohonochulpark.org/wordpress/</a> , <a href="http://www.tohonochulpark.org/wordpress/wp-content/themes/cognoblu/images/PDFs_edu/2007TrailGuideUpdateforWeb.pdf">http://www.tohonochulpark.org/wordpress/wp-content/themes/cognoblu/images/PDFs_edu/2007TrailGuideUpdateforWeb.pdf</a> )
Non-Profit	Sonoran Permaculture Guild	Education	Courses and Workshops	(?) ongoing/ active	x	x		x										x					Offers courses in rainwater- and greywater-harvesting design and growing native food plants	Sonoran Permaculture Guild ( <a href="http://www.sonoranpermaculture.org/">http://www.sonoranpermaculture.org/</a> ); Dan Dorsey ( <a href="mailto:dorsey@dakotacom.net">dorsey@dakotacom.net</a> )
Non-Profit	Watershed Management Group	Implementation	Green Streets - Green Neighborhoods	None found		x		x	x		x	x										x	Program promotes and installs green infrastructure practices to improve community livability; works through neighborhoods, homeowners' associations, businesses, and informal community groups	Watershed Management Group ( <a href="http://www.watershedmg.org/green-streets">http://www.watershedmg.org/green-streets</a> )
Non-Profit	Tucson Audubon Society	Implementation	Conservation Programs	None found	x			x	x									x				x	Programs work to establish and improve wildlife habitat in urban and ex-urban areas, using sustainable techniques like water harvesting; habitat restoration efforts incorporate permaculture methods; program also emphasizes the economic importance of birding and wildlife habitat conservation/ restoration	Tucson Audubon Society ( <a href="http://www.tucsonaudubon.org/what-we-do/conservation.html">http://www.tucsonaudubon.org/what-we-do/conservation.html</a> ); Kendall Kroesen (520) 629-0510 x7006, <a href="mailto:kkroesen@tucsonaudubon.org">kkroesen@tucsonaudubon.org</a> )
Non-Profit	Sonoran Institute	Demonstration	Santa Cruz River Initiative	2009 (?) - ongoing	x	x	x															x	Project to protect and restore the Santa Cruz River; efforts include policy work (involvement with City of Tucson's rainwater- and greywater-harvesting ordinances); water harvesting demonstration sites, and river health reports that stress ecosystem services provided by riparian areas	Sonoran Institute ( <a href="http://www.sonoraninstitute.org/where-we-work/southwest/santa-cruz-river.html">http://www.sonoraninstitute.org/where-we-work/southwest/santa-cruz-river.html</a> ); Emily Brott ( <a href="mailto:ebrott@sonoraninstitute.org">ebrott@sonoraninstitute.org</a> ) and Claire Zugmeyer ( <a href="mailto:czugmeyer@sonoraninstitute.org">czugmeyer@sonoraninstitute.org</a> )
Non-Profit	The Nature Conservancy	Demonstration	Tucson Conservation Center	None found	x	x		x														x	The Tucson Conservation Center is being developed as a rainwater harvesting demonstration site with self- and docent-led tours available; includes active and passive techniques, permeable pavement, and native plants	The Nature Conservancy ( <a href="http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/arizona/event/rainwater-harvesting-tours.xml">http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/arizona/event/rainwater-harvesting-tours.xml</a> ); Dorothy Boone ( <a href="mailto:dboone@tnc.org">dboone@tnc.org</a> )
Non-Profit	Watershed Management Group	Implementation	Green Infrastructure Design Standards	October, 2010		x		x														x	WMG worked with the City of Tucson's Department of Transportation to develop design standards for in-street traffic calming devices that collect and infiltrate stormwater	Watershed Management Group ( <a href="http://www.watershedmg.org/green-streets/resources#GI-design-standards">http://www.watershedmg.org/green-streets/resources#GI-design-standards</a> )
Non-Profit	Tucson Botanical Gardens	Education	Workshops and on-site implementation	?	x	x		x															Promotes responsible and appropriate use of plants and water in a desert environment through education and demonstration	Tucson Botanical Gardens ( <a href="http://www.tucsonbotanical.org/education/">http://www.tucsonbotanical.org/education/</a> )
Institutional/Commercial	University of Arizona	Demonstration	Green Fund	March 2010	x	x																x	Creates opportunities for students and employees at the University of Arizona to test innovative solutions to challenges in renewable energy, energy and water efficiency, waste reduction, and environmental sustainability education, research, and outreach; GSI-related projects include water harvesting, composting, and calculation of tree benefits	University of Arizona Institute of the Environment ( <a href="http://portal.environment.arizona.edu/campus-sustainability/green-fund">http://portal.environment.arizona.edu/campus-sustainability/green-fund</a> )
Institutional/Commercial	University of Arizona	Implementation	Surface Water Working Group	(?) ongoing/ active	x	x		x															A group of staff, faculty, and students from across campus who work to address a broad range of surface water issues; works to implement surface water-related projects on campus which achieve multiple, integrated objectives, such as stormwater mitigation, water harvesting, urban open space, neighborhood buffering, and water sustainability	University of Arizona Planning, Design, and Construction ( <a href="http://www.pdc.arizona.edu/planning/Water.aspx">http://www.pdc.arizona.edu/planning/Water.aspx</a> ); Grant McCormick ( <a href="mailto:grantmc@email.arizona.edu">grantmc@email.arizona.edu</a> )
Institutional/Commercial	Community Food Bank	Education	Educational farms and gardens	2010	x			x															All education farms and gardens include water harvesting and water conservation practices; Community Food Bank also offers regular classes on water harvesting, greywater, and wise water use in English and Spanish; Nuestra Tierra demonstration and market garden currently being considered for designation as a Water Harvesting Demonstration Site with City of Tucson	Community Food Bank of Southern Arizona ( <a href="http://communityfoodbank.com/programs-services/farmsgardens-and-farmers-markets/">http://communityfoodbank.com/programs-services/farmsgardens-and-farmers-markets/</a> ); Leona Davis ( <a href="mailto:LDavis@communityfoodbank.org">LDavis@communityfoodbank.org</a> )
Institutional/Commercial	University of Arizona	Guideline	Surface Water Master Implementation Plan	2006	x	x																x	Recognizes the long-term, inherent value of water by conserving, harvesting, capturing, and reusing it; prioritizes surface water mitigation projects that put runoff to beneficial use close to the source; integrates engineering and ecological techniques	University of Arizona Planning, Design, and Construction ( <a href="http://www.pdc.arizona.edu/Files/Planning/UA%20Surface%20Water%20Master%20Implementation%20Plan-FINAL-2-13-09-optimized.pdf">http://www.pdc.arizona.edu/Files/Planning/UA%20Surface%20Water%20Master%20Implementation%20Plan-FINAL-2-13-09-optimized.pdf</a> ); Grant McCormick ( <a href="mailto:grantmc@email.arizona.edu">grantmc@email.arizona.edu</a> )
Institutional/Commercial	TriSports	Implementation	On-site cisterns	April, 2011	x																		Two large cisterns that hold 36,000 gallons of water	TriSports.com ( <a href="http://www.trisports.com/employment-opportunities.html">http://www.trisports.com/employment-opportunities.html</a> )
Institutional/Commercial	University of Arizona	Guideline	University of Arizona Manual of Design and Specifications Standards	June 2008	x	x	x															x	Water harvesting incorporated by the University's Surface Water Working Group into sections on Surface Water Procedure and Drainage & Surface Water Guidelines	University of Arizona Planning, Design, and Construction ( <a href="http://www.pdc.arizona.edu/workwithua/dss/">http://www.pdc.arizona.edu/workwithua/dss/</a> ); Grant McCormick ( <a href="mailto:grantmc@email.arizona.edu">grantmc@email.arizona.edu</a> )
Residential	Habitat for Humanity	Implementation	Green Initiative	June, 2010	x			x															Home built in June, 2010 featured a greywater reuse system to irrigate fruit trees, this system will be incorporated into all future home builds; other standards used by Habitat for Humanity Tucson include drought-tolerant landscaping with shade trees placed for maximum benefit	Habitat for Humanity Tucson ( <a href="http://www.habitattucson.org/about_habitat_homes/green-initiative/">http://www.habitattucson.org/about_habitat_homes/green-initiative/</a> )
Residential	Civano	Implementation	Master-planned community	1991 (rezoning)	x			x														x	Master-planned community focused on sustainable design and building principles; protection and salvage of native plants emphasized, rainwater harvesting included in many design plans; major washes in the development site included in generous open space element	Civano Neighborhood Association ( <a href="http://www.civano.com/">http://www.civano.com/</a> , <a href="http://www.terrain.org/unsprawl/5/">http://www.terrain.org/unsprawl/5/</a> ); City of Tucson Planning ( <a href="http://cms3.tucsonaz.gov/sites/default/files/imported/plans/all/civanotext.pdf">http://cms3.tucsonaz.gov/sites/default/files/imported/plans/all/civanotext.pdf</a> )
Residential	Trees for Tucson	Implementation	Low Cost Shade Trees	1989 (TEP sponsorship since 1993)	x	x		x	x													x	Offers residents served by Tucson Electric Power 2-4 low-cost shade trees if planted to provide optimal shade for the home, Trico Electric cooperative customers can receive 3 trees per year at a slightly higher cost; 3 of the 4 trees offered are native, all are low water-use; planting instructions encourage the use of water harvesting to supplement irrigation	Trees for Tucson ( <a href="http://www.tucsoncleanandbeautiful.org/trees-for-tucson/low-cost-shade-trees/">http://www.tucsoncleanandbeautiful.org/trees-for-tucson/low-cost-shade-trees/</a> )
Residential	Watershed Management Group	Implementation	Conserve to Enhance (with Sonoran Institute, UA Water Resources Research Center)	January, 2011	x																		Program participants receive subsidies to install water harvesting features at their homes in return for donating the money saved on their water bill for riparian enhancement; project recently completed the pilot stage	Watershed Management Group ( <a href="http://www.watershedmg.org/c2e_c2e@watershedmg.org">http://www.watershedmg.org/c2e_c2e@watershedmg.org</a> )