MEMORANDUM

Date: March 23, 2015

To: The Honorable Chair and Members
Pima County Board of Supervisors

From: C.H. Huckelberry
County Administrator

Re: **2014 Year End Progress Report for the Water and Wastewater Infrastructure Supply and Planning Study**

Attached is a February 4, 2015 memorandum reporting on the progress achieved by Pima County in implementing the Water and Wastewater Infrastructure Supply and Planning Study (WISP) Action Plan for water sustainability that was adopted by the Board of Supervisors in November 2010.

As noted in this memorandum, we are in the fourth year of a five-year implementation plan with a focus on four particular areas: 1) Comprehensive Integrated Planning, 2) Respect for the Environment, 3) Water Supply and 4) Demand Management.

During Calendar Year 2014, Pima County made significant progress in various conservation program efforts and the improvement of water quality to increase the use of reclaimed water from the completion of the Tres Rios and Agua Nueva Water Reclamation Facilities. Pima County will continue to cooperate and collaborate with the City of Tucson and other jurisdictions in the region to assure our water resources are managed effectively.

If you have any questions regarding this report, please contact Water Policy Manager Kathleen M. Chavez.

CHH/mjk

Attachment

c: John Bernal, Deputy County Administrator for Public Works
Jackson Jenkins, Director, Regional Wastewater Reclamation
Kathleen M. Chavez, Water Policy Manager, Regional Wastewater Reclamation

0500

PIMA COUNTY
REGIONAL WASTEWATER RECLAMATION DEPARTMENT
201 NORTH STONE AVENUE
TUCSON, ARIZONA 85701-1207

JACKSON JENKINS
DIRECTOR

PH: (520) 724-6500
FAX: (520) 724-9635

February 4, 2015

TO: C.H. Huckelberry, County Administrator

THRU: John M. Bernal, Deputy County Administrator - Public Works

FROM: Jackson Jenkins, Director - RWRD

SUBJECT: 2014 Year End Progress Report
WISP Action Plan for Water Sustainability (2010-2015)

The Water and Wastewater Infrastructure, Supply and Planning Study's (WISP) Action Plan for Water Sustainability was adopted by the Board in November 2010. It consisted of a five-year implementation period with a focus in four areas; Comprehensive Integrated Planning, Respect for the Environment, Water Supply and Demand Management. Pima County and the City of Tucson have since provided progress reports in each of the past three years.

Attached is the 2014 Year End Progress Report of the WISP Action Plan detailing Pima County's progress. As reported last year, the City of Tucson will be preparing a separate City-focused progress report to its governing body.

During 2014, Pima County made significant progress in a number of key areas including:

- CIP 1-9: Pima County's Comprehensive Plan Update, Pima Prospers, meets a significant share of action plan items by incorporating conservation, water efficiency, land use and community design into a long term vision for Pima County. The proposed update, to be finalized mid-2015, encourages growth away from environmentally sensitive areas and links water resource and land use planning.

- RFE 2-3: Two conservation programs, Conserve-to-Enhance and the Conservation Effluent Pool, will preserve existing riparian areas and identify needs and opportunities for future restoration. C2E, now in its fourth year of grant awards, has funded seven neighborhood grant proposals. During 2014, a citizens-led task force identified candidate projects for use of conservation effluent pool water for riparian restoration.

- WS 10: The completion of the Tres Rios and Agua Nueva Wastewater Reclamation Facilities concludes the Regional Optimization Management Plan (ROMP). The improved water quality will foster increased use of reclaimed water to augment renewable water supplies and sustain riparian restoration in the Santa Cruz River.

- WS020: A strategic plan for the use of county-owned reclaimed water was accepted by the County Administrator and shared with the Board of Supervisors. This plan maximizes the efficient and beneficial use of Pima County's reclaimed water.

- WS-30: Pima County Drought Management Plan was updated with the preparation of the *Vulnerability Assessment in Drought Mitigation Report* and amendments to the *Drought Response Plan and Water*

Wasting Ordinance approved by the Board in August 2014. Staff is also providing quarterly drought condition and CAP water supply status reports.

- DM-1: Regional collaboration on a Residential Water Demands and Trends Study provides water demand forecast certainty for planners and policy makers. Monitoring water use trends increases our community's ability to target efficient water conservation strategies.

- DM-7: Pima County and the City of Tucson collaborated on a Green Infrastructure/Low Impact Development Guidance Manual with input from the LID Working Group. An economic and risk analysis evaluated the social and environmental costs and benefits of green infrastructure/low impact development features. Neighborhood rainwater and stormwater harvesting can be used to meet outdoor landscaping needs while improving floodwater retention and limiting migration of contaminants.

This report will be available on the County WISP website. The City of Tucson's Year End Report will also be on the WISP website.

Should you have any questions, I am available at your convenience.

Attachment

c: Kathleen Chavez, Water Policy Manger
Arlan Colton, DSD Planning Director
Nicole Fyffe, Assistant to the County Administrator
Linda Mayro OSC Director
Chris Cawein, NRPR Director
Suzanne Shields, RFCD Director

Comprehensive Integrated Planning 2014 Report

Pima Prospers, the County's Comprehensive Plan update, which constitutes a significant share of the County's responsibility in the Comprehensive Integrated Planning subset, is progressing toward a third draft for the Planning Commission's consideration after completion of another series of stakeholder and public participation meetings to be completed in December of 2014. These meetings, in accordance with the Plan's public participation plan, followed two other sets of advertised community meetings in the fall of 2013 and spring of 2014, special events and online media involving a broad spectrum of stakeholders.

Work on the second draft of the Comprehensive Plan was completed and changes and edits are expected before completion in mid-2015. Pima County's Development Services has coordinated the process with its consultants; however the process has involved many county staff in a wide range of departments. Together, the team has undertaken an exhaustive review, cooperating across departments and careful in gathering public and stakeholder sentiment, to provide an update that incorporates conservation, water efficiency, land use and community design into a 20-year blueprint guiding creation of healthy, efficient, equitable and attractive environments. WISP's Comprehensive Integrated Planning subset guides Pima Prospers water resource planning and complements the document as a summary of an informed water sustainability policy adopted by the County.

Continuing progress is planned to bring to completion all WISP Comprehensive Integrated Planning goals; the County, following adoption of the wide-ranging Plan, will delve into pre-zoning for identified lands and a review of the County's Cluster Ordinance to enhance water efficiency. Implementation of Pima Prospers to achieve a shared Vision for Pima County based on the overarching principle of creating healthy communities will be supported by an Interagency Monitoring Team (IMT) integral to the Plan and under the auspices of the County Administrators office.

City/County Action Plan Program Areas
General and Comprehensive Plan Updates
Smart Growth Tools and Regulations
Linking Water and Land Use Planning

County Plans & Programs
❖ *Pima Prospers* Comprehensive Plan Update
❖ Water Resource Element-Comprehensive Plan
❖ Southwest Infrastructure Plan (SWIP)
❖ Conservation Land System (CLS)
❖ Conservation Acquisition Program
❖ Cluster Ordinance
❖ Interagency Monitoring Team (IMT)
❖ Economic Development Plan

Departments and Organizations
Pima County Development Services Department (DSD), Regional Wastewater Reclamation Department (RWRD), Regional Flood Control District (RFCD), Community and Economic Development (CED)
City of Tucson Housing and Community Development, Planning and Development Services, Office of Conservation and Sustainable Development, Tucson Water (TW)
TREO, Metro Water, Safe Yield Task Force

Goals	Recommendations	Action Plan Items
1.0 Encourage sustainable urban forms Ensure that the form of growth enhances beneficial water/energy, environment, economic and social outcomes through inclusion of diverse housing types and compact, environmentally sensitive and walkable communities.	1.1 Require and encourage smart growth principles	CIP 2, 3, 10, 11, 14, 15
2.0 Direct growth to suitable growth areas Direct future growth away from environmentally sensitive areas and closer to existing infrastructure through infrastructure investments, regulation, policies, and open space acquisitions.	2.1 Encourage growth in four (4) suitable growth areas/existing built environment as highest priority 2.2 Link capital planning and land use planning/direct investment to desired growth areas 2.3 Acquire open space to define desired growth areas 2.4 Conduct regional growth scenario modeling	CIP 1, 4, 5, 6, 7, 8, 9, 12, 13, 16, 18
3.0 Integrate land use and water resources planning Enhance efforts to link land use and water resources planning to foster increased use of renewable water resources in new development and to balance economic, environmental and human needs for water.	3.1 Conduct comprehensive water resource planning outside of the obligated service area 3.2 Consider obligated service area expansion based on above analysis and additional criteria 3.3 Continue to track resources for new development/County Water Element, City Water Checkbook 3.4 Pursue wheeling and recharge agreements 3.5 Work toward regional solutions to address hydrological pumping/recharge disconnect	CIP 19, 20, 21, 22, 23
4.0 Growth should pay for itself over time and be financially sustainable Ensure that the full cost of new development is considered and that growth related costs for water and wastewater are recovered.	4.1 Put mechanisms in place to ensure fiscal sustainability of new development 4.2 Continue to ensure "growth pays for growth" in Water and Wastewater financial planning	CIP 17

Program 1: General and Comprehensive Plan Updates

Lead Jurisdiction	Action Plan Item	Status
COT/PC	CIP 1: Analyze infrastructure and public facilities needs in preparation for updates to the Plans. (2.1)	COMPLETED. Dual lead. Final report will be released with completion of the Comprehensive Plan in mid-2015. Appendix A of Pima Prospers serves as a "backbone" and preparation for the policy framework and implementation of the Plan; it is a background and current condition volume, cataloging water resources, availability, infrastructure and use in each planning area. City's *Plan Tucson* adopted in 2013.
COT/PC	CIP 2: Update the Urban Form elements of the Plans to encourage smart growth and sustainable urban form. (1.1)	**Carry-Over from 2011** CONTINUING. Dual lead. Second draft of the Comprehensive Plan has been completed. Expected possible amendments before completion in mid-2015. Focused Development Investment Areas Element (Chapter 3.2) recognizes the link between urban form, conservation and economic development and the appropriate characteristics that balance the region's resources and growth management strategies within the scale, character and identity of the area. The Housing and Community Design Element (Chapter 3.5) also addresses this, and the subject matter is weaved throughout the Draft plan.
COT/PC	CIP 3: Review and update Water Elements in Plans to ensure consistency with the City/County Water Study recommendations and state requirements. (1.1)	**Carry-Over from 2011** CONTINUING. Dual lead. Second draft of the Comprehensive Plan has been completed. Expected possible amendments before completion in mid-2015. Continuing to address a sense of the water supply and demand in the final draft to the extent possible by a county without a water company. The Water and Wastewater Infrastructure, Supply and Planning Study (WISP) is specifically referenced in the Water Resource Element of Pima Prospers draft with the intent of complying with all applicable goals and recommendations. City's *Plan Tucson* adopted 2013.
COT/PC	CIP 4: Explore policy to provide for pre-zoning in growth areas as part of updates to the Plans. (2.1)	**Carry-Over from 2012** CONTINUING. Dual lead. Expected that a recommendation for identified lands (if selected) will be made to the Board of Supervisors with the Plan adoption. The recommendation will be to direct staff to pursue pre-zoning to make the properties more shovel ready, if the property owners agree in writing with the change. City's *Plan Tucson* adopted 2013.

Lead Jurisdiction	Action Plan Item	Status
COT/PC	CIP 5: Identify and designate suitable growth areas in the updates to the Plans. (2.1)	**Carry-Over from 2012** CONTINUING. Dual lead. Second draft of the Comprehensive Plan has been completed. Expected possible amendments before completion in mid-2015. Pima Prospers recognizes Southwest Infrastructure Plan (SWIP) in new draft of Special Area Policies. Future sewer system expansion is planned to support regional growth areas (Chapter 4.4). Identifies Focused Development Investment Areas (growth areas) and land uses appropriate in size and location for future employment and revenue generating development. Other focused development areas will continue to be Flowing Wells and the City of Tucson. All municipalities, key target areas and revitalization corridors identified by the Community Development Department have been added as well as Economic Development areas targeted for public-private investment. City's Plan Tucson adopted 2013.
COT/PC	CIP 6: Identify and designate employment and job centers in the updates to the Plans. (2.1)	**Carry-Over from 2012** CONTINUING. Dual lead. Within Comprehensive Plan and the County Administrator's updates to the Economic Development Strategic Plan. The Board-adopted strategic economic development plan will be interlinked with Pima Prospers, and it is being updated; economic development centers and corridors are planned to support emerging and established industry and support small business; Focused Development Investment Areas Element recognizes the link between urban form and economic development, seeks to coordinate public and private investment and funding partnerships. City's Plan Tucson adopted 2013.
COT/PC	CIP 7: Establish infrastructure and service phasing boundaries within growth areas. (2.2)	**Carry-Over from 2012** CONTINUING. Dual lead. Special Area policies call for infrastructure phasing plan for improvements. Establishment of methodology to determine need and assess cost of new facilities and services, Levels of Service Standards, and timeframe and phasing with other uses encouraged as a pattern of development. City's Plan Tucson adopted 2013.
COT/PC	CIP 8: Develop an implementation component for each of the Plans. (2.2)	**New to 2013** CONTINUING. Dual lead. The implementation strategies and matrix of timing and responsibility for them (what will become Appendix B of the Plan) are being developed within the Comprehensive Plan. An Interagency Monitoring Team (IMT) will coordinate implementation of Pima Prospers, managing all lead departments' contribution to the mission of aligning the County's planning, programming and budget to the shared vision of the Plan; the IMT will be

Lead Jurisdiction	Action Plan Item	Status
		responsible for publishing an annually updated work program, identifying deviations from implementation strategy and reporting to the Board and public. Appendix B of Pima Prospers will serve as the initial work program, listing lead department, schedule and funding source, while Chapter 10.8 defines the intent of the IMT and implementation strategy. City's Plan Tucson adopted 2013.
COT/PC	CIP 9: Link County Conservation Acquisition Program with updated Plans. (2.3)	**New to 2013** CONTINUING. Dual lead. Intent of the Comprehensive Plan, but dependent upon administration of the land acquisition program. For both statutory reasons and land market reasons, the Open Space Element of the Plan will only address already acquired property. To the maximum extent possible, CIP and future bond programming, as well as county budget and development review manuals, will be aligned to Pima Prospers to ensure universally shared vision is achieved.

Program 2: Smart Growth Tools and Regulations

Lead Jurisdiction	Action Plan Item	Status
COT	CIP 10: Identify opportunities to promote mixed uses and well-designed density. (1.1)	CITY LEAD
PC	CIP 11: Revise County's Cluster Ordinance to improve water efficiency of new development. (1.1)	Review of the County's Cluster Ordinance for changes, including water efficiency, after the Comprehensive Plan is completed. If water efficiency application was limited to the cluster ordinance, little would be accomplished given how few cluster projects are done. Pima Prospers expands this well beyond cluster development toward a voluntary, incentivized manner for residential development.
COT/PC	CIP 12: Evaluate improvement districts as a tool to purchase natural areas/riparian habitat. (2.3)	NO REPORT.

Lead Jurisdiction	Action Plan Item	Status
COT	CIP 13: Work with TREO on public/private collaboration, base job creation (multiplier) and urban revitalization- water policy aligned with economic goals. (2.1)	**Carry-Over from 2011** CITY LEAD
COT	CIP 14: Conduct a Land Use Code sustainability audit to identify opportunities to encourage sustainable urban forms. (1.1)	**Carry-Over from 2011** COMPLETED/CONTINUING.CITY LEAD
COT/PC	CIP 15: Explore conservation subdivision requirement in Conservation Land System (CLS) to better integrate new development into environmentally sensitive areas. (1.1)	CONTINUING. Included in Comprehensive Plan development. The Plan seeks to encourage use the Conservation Subdivision Ordinance (CSO) for proposed subdivisions zoned CR-1 (or less intense) in the CLS, meeting all CLS requirements if any change in land use. CLS will be integrated into Pima Prospers, linking the two maps for the first time. Incentives for residential conservation subdivisions within the Low Intensity Urban land use categories of LIU3.0, 1.2, 0.5 and 0.3.
COT/PC	CIP 16: Identify and address barriers to infill. (2.1)	**Carry-Over from 2011.** CONTINUING. CITY LEAD
COT	CIP 17: Develop a fiscal sustainability model. (4.1)	**Carry-Over from 2012.** CITY LEAD
COT	CIP 18: Explore City transfer of development rights to help direct growth to suitable growth areas. (2.1)	**Starts 2014** CITY LEAD

Program 3: Linking Water and Land Use Planning

Lead Jurisdiction	Action Plan Item	Status
COT	CIP 19: Continue wheeling negotiations between Tucson Water and other water providers to deliver more renewable supplies to the region. (3.4)	COMPLETED/CONTINUING. CITY LEAD

Lead Jurisdiction	Action Plan Item	Status
COT/PC	CIP 20: Participate in the Safe Yield Task Force to address pumping recharge disconnect. (3.5)	**Carry-Over from 2011** COMPLETED/CONTINUING. The Task Force continues to meet to strategize Safe Yield by 2025 and develop Fourth Management Plan. City of Tucson and Pima County staffs are participating.
COT	CIP 21: Implement Tucson Water Service Area Policy and annual water resource "checkbook balance" review. (3.2)	COMPLETED/CONTINUING. CITY LEAD
PC	CIP 22: Implement Pima County Water Resource Element to assess water resource impacts of new development. (3.3)	CONTINUING. County Lead. A Preliminary Integrated Water Management Plan (PIWMP) or Water Supply Impact Review is specified as a continuing water requirement for all applicable comprehensive plan amendments and rezoning proposals in order to minimize impacts of development upon water supply for existing and future residents followed by appropriate conservation measures as conditioned.
PC	CIP 23: Conduct a pilot study of integrated water resource planning in the Southwest area. (3.1)	COMPLETED. Increased coordination occurring with Tucson Water and Metro Water for water service to most of the undeveloped areas of the Southwest area.

Respect for Environment
2014 Report

In 2014, conservation programs more fully matured and built upon previous success of implementation and design. C2E and CEP are fundamental action items in achieving the WISP goal of developing a water supply for the environment (RFE 5.0).

Conserve 2 Enhance (C2E) is entering its fourth year of grant awards for community riparian and green infrastructure projects. Seven neighborhood grant proposals have been funded; C2E has dispersed more than $55,000 to fund green infrastructure, rainwater harvesting and habitat restoration proposals championed by neighbors and local non-profits. Millions of gallons of water have been saved (5.6 million). C2E is encouraging a more discernible connection between individual water conservation and realization of local waterway enhancement and ameliorating neighborhoods lacking natural feature or function within their watershed. C2E expansion and recruitment is underway to find new partner communities.

The Conservation Effluent Pool (CEP), first conceptualized fourteen years ago, may soon be utilized for projects of immediate potential; the CEP Task Force identified 13 candidate projects in 2014 and focused on four proposals that could be rapidly implemented. The Task Force established methodology and criteria in the selection of current and future candidate sites and built an administrative, reporting and record-keeping structure. With the selection of a County CEP Administrator and direction to initiate the projects, in cooperation with the City, CEP water presents substantial riparian restoration opportunity.

County Flood Control, Parks and Sustainability and Conservation staff are newly assigned the task of drafting a threats assessment and conservation strategy for the ecologically rich and unique Cienega Creek. Open space has drawn strong voter support in the past and County residents will have the chance to support more open space purchases in an upcoming bond election for an acquisition package totaling $120 million, strengthening the Sonoran Desert Conservation Program.

City/County Action Plan Program Areas
Collaboration for Environmental Restoration
Preservation and Protection of Riparian Areas
Incorporation of Multiple Benefit Features into Capital Improvement Projects
Development of a Lower Santa Cruz River Management Plan

County Plans & Programs
❖ Sonoran Desert Conservation Plan (SDCP)
❖ Multi-Species Conservation Plan (MSCP)
❖ Conservation Land System (CLS)
❖ Conservation Effluent Pool (CEP)
❖ County Bond Program
❖ Capital Improvement Program (CIP)
❖ Riparian Habitat Mitigation Plan (RHMP)
❖ Regional Optimization Management Plan (ROMP)
❖ Lower Santa Cruz Living River Project

Departments and Organizations
Pima County Regional Wastewater Reclamation Department (RWRD), Regional Flood Control District (RFCD), Natural Resources Parks and Recreation (NRPR), Office of Sustainability and Conservation (OSC), County Attorney's Office
City of Tucson Office of Conservation and Sustainable Development, Tucson Water, City Attorney's Office
Pima Association of Governments (PAG), Army Corp of Engineers, Conserve 2 Enhance (C2E)

Goals	Recommendations	Action Plan Items
1.0 Preserve existing riparian areas through coordinated regulation, policy and outreach Pursue a coordinated approach to preserving existing riparian areas and foster increased public support of protection and maintenance of healthy ecosystems.	1.1 Continue preservation through acquisition, regulation, education and outreach 1.2 Address non-exempt wells and surface water diversions affecting riparian areas	RFE 4, 6, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18
2.0 Identify needs and opportunities for future restoration Pursue a collaborative, comprehensive and systematic strategy to identify needs, opportunities, resources and partnerships to implement cost-effective regional environmental restoration.	2.1 Develop regional policy on regulatory compliance projects 2.2 Collaborate regionally on riparian restoration 2.3 Work with ADEQ on water quality standards for habitat restoration	RFE 2, 3, 5,
3.0 Ensure that public projects are multi-benefit including restoration, stormwater management, recharge and public amenity Maximize beneficial use of reclaimed water, rainwater and stormwater in flood control, water and wastewater treatment facilities and other capital projects.	3.1 Pursue multi-benefit public projects using reclaimed water 3.2 Pursue stormwater management opportunities in areas dominated by impervious surface	RFE 19, 20, 21, 22,
4.0 Ensure the future of riparian and aquatic habitat along the effluent-dependent reach of the Santa Cruz River Evaluate alternative strategies for protection of the riparian and aquatic habitat along the effluent-dependent reach of the Santa Cruz River building upon prior research and planning studies.	4.1 Advocate for changes to allow full recharge credit for Sec of Interior effluent 4.2 Develop a "Lower Santa Cruz River Management Plan" 4.3 Build upon pilot restoration demonstration projects to develop a portfolio of multi-purpose projects 4.4 Incorporate in and off channel recharge facilities features	RFE 23, 24, 25, 26

Goals	Recommendations	Action Plan Items
5.0 Develop water supply for the environment Ensure an adequate amount of water is available to meet the seasonal needs of restored habitats.	5.1 Finalize the IGA for the Conservation Effluent Pool 5.2 Link water conservation to environmental preservation/restoration	RFE 1, 7

Program 1: Collaboration for Environmental Restoration

Lead Jurisdiction	Action Plan Item	Status
COT/PC	RFE 1: Finalize the Conservation Effluent Pool (CEP) implementing agreement, establish City/County CEP administrators – implement CEP. (5.1)	COMPLETED.
COT/PC	RFE 2: Establish a Regional Restoration Working Group to inventory resources, develop criteria for restoration and identify initial projects. (2.2)	Dual Lead. A citizens-led group worked with City and County to inventory and identify initial projects for the use of the Conservation Effluent Pool (CEP). The citizens presented their report to the governing bodies, and both City and County designated administrators for the program. The administrators are preparing an application form. The City is developing a project centered on the Mission Garden area which is likely to be the first to use the CEP.
PC	RFE 3: Inventory City and County lands for suitable riparian restoration. (2.2)	**Carry-Over from 2012.** County Lead. RFCD has identified suitable County lands for riparian restoration via Clean Water Act (CWA) in-lieu mitigation program. In November 2014, Mr. Huckelberry directed that RFCD prepare a detailed plan for Canoa Ranch In-Lieu Fee to the Corps of Engineers for approval. Paseo de las Iglesias Phase 1 project is under construction. The County, RFCD and Sonoran Institute are studying conditions along the Santa Cruz River effluent-dependent stream, which are changing as a result of improvements of water quality.
COT	RFE 4: Coordinate development of volunteer stewardship program with Tucson Audubon pending their grant funding. (1.1)	ON HOLD. CITY LEAD.

Lead Jurisdiction	Action Plan Item	Status
PC	RFE 5: Work with Audubon and Army Corps of Engineers (ACOE) on watershed based approach to utilizing group's 404 in-lieu mitigation fees/funds. (2.1)	CONTINUING. **County Lead**. County adapting Action Item by development of a new Army Corps of Engineers prospectus for Canoa Ranch In-Lieu Fee Program.
COT/PC	RFE 6: Begin development of outreach/education to inform community of riparian importance and protection/restoration. (1.1)	**Carry-Over from 2013** NO REPORT.
COT/PC	RFE 7: Participate in Conserve to Enhance (C2E) program to develop funding source to acquire water for environment. (5.2)	COMPLETED/CONTINUING.

Program 2: Preservation and Protection of Riparian Areas

Lead Jurisdiction	Action Plan Item	Status
PC	RFE 8: Adopt and implement Lee Moore Basin Management Plan to protect riparian habitat in future growth area. (1.1)	COMPLETED. **County Lead**. RFCD
PC	RFE 9: Adopt revised County riparian mitigation guidelines associated with their habitat preservation ordinance. (1.1)	COMPLETED. **County Lead**. OSC
COT	RFE 10: Finalize City's new Riparian Area Protection Ordinance and seek approval from M&C. (1.1)	CITY LEAD
COT/PC	RFE 11: Identify ways to improve City/County data sharing and develop annual monitoring reports that address shallow groundwater areas. (1.2)	COMPLETED. **County Lead**. OSC-PAG report on groundwater pumping completed.

Lead Jurisdiction	Action Plan Item	Status
PC	RFE 12: Apply for County incidental take permit associated with MSCP and implement CLS and guidelines. (1.1)	CONTINUING. **County Lead.** OSC. Application has been review by USFWS; biological opinion is being prepared; all documents have been revised and publication is pending on biological opinion and regional office approvals.
COT	RFE 13: Continue to develop City Southlands Habitat Conservation Plan. (1.1)	CONTINUING. CITY LEAD
COT	RFE 14: Inventory high value riparian areas and develop monitoring/management database. (1.1)	**Carry-Over from 2012**. CITY LEAD
PC	RFE 15: Improve management of public lands – field assessment and remediation of trespassing and dumping. (1.1)	**Carry-Over from 2013** CONTINUING. **County Lead**. Buffel Grass Eradication- Office of Emergency Services administering $3 million FEMA grant for critical infrastructure protection along Mission Road and TIA corridor; NRPR, PCDOT and RFCD have ongoing efforts benefitting hundreds of acres and miles of roadway.
PC	RFE 16: Develop response/management guidelines by responsible agency to address threats to public land. (1.1)	**Carry-Over from 2012** CONTINUING. **County Lead** At Rosemont, Federal decisions are still pending. In summer 2014, Pima County requested a more general threats assessment and conservation strategy for County actions in the Cienega Creek watershed. NRPR, OCS and RFCD are collaborating on the work.
COT/PC	RFE 17: Pursue bond funding for acquisition of natural areas and riparian habitat, reclaimed extension to Vail. (1.1/1.2)	**Carry-Over from 2012** Pima County is including additional open space acquisitions for the next Bond program; funding amount will be generated by the Bond Committee through coordination with the County Administrator's office, currently about $ 120,000,000.
COT	RFE 18: Finalize City Southlands Habitat Conservation Plan and apply for incidental take permit. (1.1)	**Starts 2014** CITY LEAD

Program 3: Incorporation of Multiple Benefit Features into Capital Improvement Projects

Lead Jurisdiction	Action Plan Item	Status
PC	RFE 19: Develop guidance document for retrofit of detention basins, list basins offering opportunity for habitat restoration/recreation. (3.1)	**Carry-Over from 2012**. CONTINUING. **County Lead**. Regional Flood Control District retrofitted Kolb Road Detention using UA Landscape Architects guidance program. Preliminary evaluation of Massingale Basin is complete, further study of Massingale and Rodeo Basins underway; RFCD developing riparian restoration in basins on a case-by-case basis after individual analysis rather than generalized application. Inventory of basin multi-purpose potential previously completed.
PC	RFE 20: Retrofit Kolb Rd detention basin for environmental restoration using stormwater as demonstration project. (3.1)	COMPLETED. RFCD
PC	RFE 21: Develop guidance for multi-purpose parks – water harvesting, green development, wildlife habitat – reduce operating costs. (3.1)	**Carry-Over from 2012**. **County Lead**. NRPR guidance document for park design and construction, taking into account water harvesting. Multi-use path connections are forming the Loop and the River Park Enhancement and Expansion Initiative incorporates landscape and irrigation using reclaimed water where feasible.
COT/PC	RFE 22: Develop joint policy on rainwater harvesting, stormwater retention, non-potable use, recreation and ecological features in CIP budgets. (3.1)	**Carry-Over from 2013.**

Program 4: Refinement of Lower Santa Cruz River Management Plan

Lead Jurisdiction	Action Plan Item	Status
PC	RFE 23: Finalize Tres Rios del Norte Feasibility Study, broad concept for Santa Cruz River (SCR), review alternatives with Restoration Working Group. (4.2)	**Carry-Over from 2011** CONTINUING. **County Lead**. Purchase of land in 2012, El Corazon de Tres Rios Del Norte proposed bond project is a multi-phase plan utilizing RFCD levy funds, bonds and potential federal cost share of the Tres Rios del Norte Restoration project in construction of the multi-use facility connecting river parks and trails. Conceptualized restoration of the Orange Grove and Sunset

Lead Jurisdiction	Action Plan Item	Status
		Pit, RTA transportation improvements at Sunset Road and expansion of the Juan Bautista de Anza National Historic Trail along the west side of the Santa Cruz River. First phase construction start is September 2015. Congressional authorization approved. Current ACOE Feasibility Study is being amended to refocus on the area near the SCR / Rillito / CDO confluence.
PC	RFE 24: Develop refined estimates of evapotranspiration and infiltration along SCR. (4.2)	**Carry-Over from 2012** CONTINUING. **County Lead**. Detailed calculations were developed for the infiltration of effluent in the Roger to Cortaro reach of the Santa Cruz River. A component of this was an assessment of evaporation and evapotranspiration of the riparian corridor based on the vegetation species and the plant water demands of those species for Lower Santa Cruz River each spring from 2005 to 2012. Mean estimates were between 1.7 and 2.7 ac-ft/day.
PC	RFE 25: Construct project at former gravel pit using effluent and stormwater – evaluate best management of transition to stormwater. (4.3)	**Carry-Over from 2012** CONTINUING. **County Lead**. As component of El Corazon de Tres Rios Del Norte proposed bond project, conceptualized restoration of the Orange Grove and Sunset Pit.
PC	RFE 26: Conduct scenario planning to evaluate differing effluent flows, options to maintain riparian & aquatic habitat along SCR. (4.2)	**Starts 2014** CONTINUING. **County Lead**. Municipal water demand trends study may change sewage flow unit design requirements as water and wastewater providers adapt to changing demographic patterns. Lower Santa Cruz River Living River Report will monitor discharge infiltration. The first Living River Annual Report was published for the 2013 water year. The report documented the wetland health of the effluent-dependent Santa Cruz River from the Roger Rd WRF outfall to Trico Rd prior to the upgrade of the WRFs. Living River Report establishes a baseline summary of conditions- measuring evapotranspiration and infiltration as part of the river's water flow characteristics. Conditions will be monitored and documented the next two years; builds upon previous documentation such as Historical Conditions of the Effluent-Dependent Lower Santa Cruz River.

Water Supply
2014 Report

In 2014, County and City efforts converged in scrutinizing available water supply and in what way or manner it is put to use. Discussion, at all levels of management, has concentrated on water supply and future imbalance. CAP recently introduced an incongruity of Lake Mead operation, a *structural deficit*, which illustrates the consequence of imbalance identified by the Bureau of Reclamation's Colorado River Basin Water Supply and Demand Study. Given uncertainty and unaccustomed questioning of long-term CAP water reliability, reliance on any single water supply is being reassessed. Full utilization of available water supplies requires optimizing re-use and consistent production of high quality effluent.

With completion of the Regional Optimization Master Plan (ROMP), effluent produced by the County meets the highest possible classification standards and stringent regulatory requirements. Re-use begins with reclamation treatment and the Agua Nueva and Tres Rios Water Reclamation Facilities supply effluent of near drinking water quality for re-use of benefit to the reclaimed system, groundwater aquifers and riparian habitats.

The County's Strategic Plan for the Use of Reclaimed Water (SPUR) recognizes the value of the County's reclaimed water supply and the multiple public benefits if optimally utilized. Similarly, Tucson Water's Recycled Water Master Plan prioritizes use for maximum benefit, though this plan proposes a higher use to increase groundwater resources and decrease reliance on drought susceptible CAP water- indirect potable reuse.

As drought reduces the regional water supply, Pima County's Local Drought Impact Group (LDIG) continues to meet, focusing attention on impacted sectors and populations within the county. A vulnerability assessment was completed to determine the scope and depth of potential drought impacts, guiding recommendation for drought ordinance revision.

City/County Action Plan Program Areas
Water Supply and Water Quality
Effluent Management
Regulatory/Policy Advocacy for Effluent, Reclaimed, Stormwater and Gray water
Drought Preparedness

County Plans & Programs
• Regional Optimization Master Plan (ROMP) • Water Resource Asset Management Plan (WRAMP) • Strategic Plan for Use of Reclaimed (SPUR) • Drought Response Plan and Ordinance • County Bond Program

Departments and Organizations
Pima County Regional Wastewater Reclamation Department (RWRD), Compliance and Regulatory Affairs Office (CRAO), Natural Resources Parks and Recreation (NRPR), Regional Wastewater Reclamation Advisory Committee (RWRAC), Water and Energy Sustainable Technology (WEST) Labs, Arid West Water Quality Research Project (AWWQRP).
Tucson Water (TW), Citizens Water Advisory Committee (CWAC).
Bureau of Reclamation (BOR), Southern Arizona Water Users Association (SAWUA), Water Rights Team, Local Drought Impact Group (LDIG), Joint Recharge Oversight Committee (JROC), State Blue Ribbon Panel.

Goals	Recommendations	Action Plan Items
1.0 Work collaboratively to acquire new water supplies for reliability Expand cooperative efforts to buttress our existing supplies and diversify our water resource portfolio to prepare for potential shortages stemming from climate change and drought.	1.1 Maximize opportunities to acquire ADD water supplies through regional cooperation 1.2 Acquire additional supplies to buttress TW CAP allocation and serve growth in obligated area 1.3 Consider all costs and benefits in the acquisition of new supplies.	WS 1, 2, 4, 5
2.0 Maximize and make efficient use of effluent and other locally renewable water supplies Reduce use of groundwater for non-potable water needs through greater emphasis on locally-renewable resources such as reclaimed water, rainwater and gray water.	2.1 Balance uses of effluent – reclaimed, environment and aquifer recharge 2.2 Continue ROMP 2.3 Stay vigilant about water quality 2.4 Evaluate reclaimed expansion from efficiency and portfolio perspective 2.5 Evaluate greywater expansion 2.6 Encourage rainwater harvesting	WS 3, 6, 7, 8, 9, 10, 11, 12, 22, 23
3.0 Address regulatory barriers to maximizing local supplies Pursue regulatory changes that will protect public health and safety yet provide flexibility to foster increased uses of reclaimed water to offset use of groundwater for non-potable demands.	3.1 Address groundwater credits for incentives to convert to reclaimed 3.2 Move to Class A+ water for reclaimed 3.3 Work with ADEQ and DWR on water quality standards for riparian projects	WS 13, 24, 25, 26
4.0 Foster increased use of reclaimed water The use of reclaimed water for irrigation, environmental purposes and aquifer augmentation should be evaluated in the overall context of maximizing the community's water resource portfolio.	4.1 Expand financing options 4.2 Maintain private payer and explore pricing incentives to encourage conversion 4.3 Lower operating costs through efficiencies 4.4 Consider reclaimed water in new developments 4.5 Other uses for reclaimed, municipal & environment 4.6 Increase dedicated reclaimed use of effluent. 4.7 Attract additional reclaimed customers based on efficiency considerations and benefits	WS 14, 15, 16, 17, 18, 19, 20, 21, 27

Goals	Recommendations	Action Plan Items
5.0 Be prepared for climate change and drought Pursue adaptive, flexible, multi-pronged preparedness strategies such as diversification of water supplies, improved demand management and increased reliance on water harvesting.	5.1 Continue multi-pronged planning approach 5.2 Use scenario planning	WS 28, 29, 30

Program 1: Water Supply and Water Quality

Lead Jurisdiction	Action Plan Item	Status
COT	WS 1: Acquire new water supplies through Project ADD Water. (1.2)	**Carry-Over from 2011** CONTINUING. CITY LEAD
COT	WS 2: Identify future water needs for Tucson Water in the 2050 Tucson Water Plan. (1.2)	**Carry-Over from 2011** CONTINUING. CITY LEAD.
COT/PC	WS 3: Water quality research and regulation updates provided to BOS, M&C, CWAC and RWRAC. (2.3)	**Carry-Over from 2011** COMPLETED/CONTINUING. Pima County Water and Energy Sustainability Center labs are conducting water quality research. RWRD activities include ROMP, CRAO functions, Industrial Wastewater Control, Dispose-a-Med program, public outreach and Biosolids/Biogas Master Plan-updates are presented regularly. Arid West Water Quality Research Project (AWWQRP) managed by the County.
COT	WS 4: City purchase of full CAP allocation and increased recharge. (1.3)	COMPLETED. CITY LEAD
COT	WS 5: Update Tucson Water 2050 Plan to consider costs, benefits, tradeoffs of acquiring new water, costs of Project ADD in water plan update. (1.3)	**Starts 2014** CONTINUING. CITY LEAD

Program 2: Effluent Management

Lead Jurisdiction	Action Plan Item	Status
COT	WS 6: Incorporate reclaimed environmental and aquifer recharge uses in Tucson Water's *Effluent Master Plan*. (2.1)	**Carry-Over from 2011** CONTINUING. CITY LEAD
COT/PC	WS 7: Develop joint recharge project in Southeast area – proposed as SHARP. (2.1)	CONTINUING. Dual Lead. Joint ownership agreement for property in negotiation. Design and permitting efforts underway informed by geotechnical field investigation and infiltration rate assessment.
COT	WS 8: Expand Sweetwater Recharge Facility. (2.1)	**Carry-Over from 2011** CONTINUING. CITY LEAD
COT/PC	WS 9: Cooperate with BOR to develop demonstration recharge projects in the Santa Cruz River. (2.1)	COMPLETED. Demonstration project completed in 2011.
PC	WS 10: Implement ROMP. (2.2)	COMPLETED. **County Lead**. Tres Rios and Agua Nueva constructed ahead of scheduled deadlines and under budget; Roger Rd has been decommissioned and received clean closure permitting. Biogas contract has been accepted and re-purposing of Roger Rd underway.
COT	WS 11: Maximize use of City effluent; convey effluent entitlements for region-wide benefit through Tucson Water *Effluent Master Plan*. (2.4)	**Carry-Over from 2011** CONTINUING. CITY LEAD
PC	WS 12: Assess impact of gray water on sewer system. (2.5)	**Carry-Over from 2011** CONTINUING County Lead RWRD reserves right to modify Designs Standards in developments that use gray water on a case by case basis in order to maintain self-cleansing sewer velocities (*Engineering Design Standards 2012*, 2.10).
COT	WS 13: Identify/assess range of incentives to encourage new reclaimed customers in preparation of *Effluent Master Plan*. (3.2)	**Carry-Over from 2011** CONTINUING. CITY LEAD

Lead Jurisdiction	Action Plan Item	Status
PC	WS 14: Pursue bond funding for reclaimed expansion benefitting public use projects. (4.1)	**Starts 2014** CONTINUING. County Lead. NRPR has submitted a bond project scope for funding for extending reclaimed water lines to county parks. RFCD will be extending reclaimed water lines to the new Paseo de la Iglesias Project on the Santa Cruz River Park between Ajo and 29th Street, and NRPR continues to evaluate opportunities to extend reclaimed lines on other sections of the Santa Cruz River Park along with other County parks.
COT	WS 15: Assess price incentives to encourage reclaimed expansion. (4.2)	**Carry-Over from 2011** CONTINUING. CITY LEAD
COT	WS 16: Increase reclaimed efficiencies through *Effluent Master Plan.* (4.3)	**Carry-Over from 2011** CONTINUING. CITY LEAD
COT	WS 17: Consider reclaimed in new development through Comp and General Plan update. (4.4)	**Carry-Over from 2011** CONTINUING. CITY LEAD
PC	WS 18: Evaluate extending reclaimed to County parks. (4.5)	**Carry-Over from 2011** CONTINUING. County Lead. NRPR has submitted a bond project scope for funding for extending reclaimed water lines to county parks. NRPR is working with RWRD to extend the County's reclaimed water line at the Tres Rios WRF to Ted Walker District Park and the Mike Jacob Sports Park.
COT	WS 19: Evaluate extending reclaimed to City parks. (4.6)	**Carry-Over from 2011** CONTINUING. CITY LEAD
PC	WS 20: Prepare effluent plan for use of County share. (4.6)	COMPLETED. County Lead. The *Strategic Plan for Use of Reclaimed (SPUR)* recommendations accepted by the County Administrator and communicated to the Board. The Plan is integral to the Water Resources Asset Management Plan (WRAMP).
COT	WS 21: Identify additional reclaimed water customers. (4.7)	**Carry-Over from 2011** CONTINUING. CITY LEAD

Program 3: Regulatory / Policy Advocacy for Effluent Reclaimed Water, Stormwater and Gray Water

Lead Jurisdiction	Action Plan Item	Status
COT/PC	WS 22: Advocate for regulatory changes to expand use of gray water through Blue Ribbon Panel (BRP) participation. (2.5)	CONTINUING. Dual Lead. State committee formed, SAWUA and County representation, no further report – dependent on legislative action.
COT/PC	WS 23: Lobby for ADEQ to recognize rainwater harvesting and green infrastructure as stormwater management Best Management Practices. (2.6)	CONTINUING. Dual Lead. No ADWR action, EPA has issued memo and fact sheet recognizing green design in compliance activity and BMP, no further report – dependent on legislative action.
COT/PC	WS 24: Change ADWR policy to provide Groundwater Savings Facility credits for turf irrigation through participation in BRP. (3.1)	CONTINUING. Dual Lead. No further report – dependent on legislative action.
COT/PC	WS 25: Numeric rather than technical based standards for reclaimed – BRP. (3.2)	CONTINUING. Dual Lead. No further report – dependent on legislative action.
COT/PC	WS 26: Flexibility in water quality and permitting for riparian and environmental projects using reclaimed – BRP. (3.3)	CONTINUING. Dual Lead. No further report – dependent on legislative action.
COT/PC	WS 27: Regulation changes to allow remediated groundwater in reclaimed system – BRP. (4.5)	CONTINUING. Dual Lead. No further report – dependent on legislative action.

Program 4: Drought Preparedness

Lead Jurisdiction	Action Plan Item	Status
COT	WS 28: Update *Tucson Water 2050 Plan* to include multi-pronged drought preparedness. (5.1)	COMPLETED. CITY LEAD

Lead Jurisdiction	Action Plan Item	Status
COT	WS 29: Update City *Drought Preparedness and Response Plan*. (5.2)	COMPLETED. CITY LEAD
PC	WS 30: Update County *Drought Management Plan*. (5.2)	COMPLETED. COUNTY LEAD. Board approved Vulnerability Assessment in Drought Mitigation Report and Drought Response Plan and Water Wasting Ordinance amendment in August 2014. Staff to provide quarterly Drought Conditions and CAP Water Supply status reports.

Demand Management
2014 Report

In 2014, two research efforts were completed; one investigating change in residential water demand and the trend to declining water use and the other quantifying the social and environmental costs and benefits of Low Impact Development (LID) and Green Infrastructure (GI). Both analyses offer insight important to planners and policy makers as well as the advancement of WISP Demand Management goals.

The Residential Water Demand Trends Study and Dynamic Planning Tool (Woodard Study) focused on water demand changes within existing housing stock while providing a qualitative analysis of future new housing characteristics. The study seeks to estimate rates of future change in water use and underlying reasons for the current decline in order to provide more clarity in planning with use of a dynamic simulation model.

The LID Working Group, having developed a Guidance Manual, expanded analysis by researching individual, regional applicable green infrastructure and low impact development practices. More traditional stormwater management design and cost-benefit calculations exclude broader consideration of value offered by LID features; by including flood risk reduction, safety, heat island mitigation, property value, and environmental benefits that can be monetized in formulation of a Sustainable Net Present Value (SNPV), the broader spectrum and value of a project can be considered.

City/County Action Plan Program Areas
Planning and Evaluation
Consistent Standards and Guidelines
Education and Outreach

County Plans & Programs
❖ *Pima Prospers* – Comprehensive Plan Update
❖ County Landscape Design Manual
❖ Neighborhood Water Harvesting Manual
❖ RFCD Detention-Retention Manual
❖ LID Working Group
❖ LID/GI Guidance Manual

Departments and Organizations
Pima County Regional Flood Control District (RFCD), Development Services (DSD), Regional Wastewater Reclamation Department (RWRD)
City of Tucson Planning and Development Services, Office of Conservation and Sustainable Development, Tucson Water (TW)
Southern Arizona Water Users Association (SAWUA)

Goals	Recommendations	Action Plan Items
1.0 Increase the effectiveness of conservation programming through coordinated planning and evaluation Improve monitoring of water use trends to increase our ability to target inefficient and high water use areas, and to encourage innovation in water conservation research, methods, and reporting.	1.1 Collect uniform data on water use patterns to identify conservation potential 1.2 Use triple bottom line and cost/benefit analysis to improve conservation program 1.3 Employ adaptive planning approach to drought preparedness	DM 1
2.0 Establish common water conservation goals and targeted methods Develop shared goals to provide a foundation for increasing regional consistency and coordination.	2.1 Establish regional, measurable water efficiency and conservation goals 2.2 Develop regional water conservation approaches	DM 3, 9
3.0 Manage demand through the design of the built environment Incorporate consistent low water usage development standards into new construction and establish land forms that reduce the "water footprint" of the built environment.	3.1 Review development regulations for consistency and improved potable water conservation	DM 4, 5, 6, 8
4.0 Manage demand through changing behaviors Enhance coordinated education programs to enable implementation of efficient practices. Assess public preferences for conservation to better understand and communicate the benefits of conserving water.	4.1 Gather public input regarding quality of life trade-offs associated with water efficiency 4.2 Advance a regional approach to conservation education, communication, pilot projects and training	DM 9
5.0 Increase the use of rainwater and stormwater Coordinate efforts to maximize and evaluate the benefits of rainwater harvesting to meet outdoor needs, reduce demands on potable supplies, increase floodwater retention and limit migration of contaminants.	5.1 Develop design guidelines for neighborhood stormwater harvesting 5.2 Analyze expanded water and stormwater harvesting potential and benefits	DM 2, 7

Program 1: Planning and Evaluation

Lead Jurisdiction	Action Plan Item	Status
COT/PC	DM 1: Collect data – assess/reduce the water/energy footprint of new development. Identify regional uniform data collection opportunities. (1.1)	CONTINUING/COMPLETED. Regional collaboration in funding the SAWUA supported *Residential Water Demand Trends Dynamic Planning Tool* (Woodard Study); An investigation of declining water use trends, underlying conditions and estimated range of future changes seeks to support dynamic modeling and scenario testing in order to address challenges facing municipal water providers. Long-term declines combined with the abrupt housing market downturn have altered the municipal sector's customer base, operations and revenue requirements; this tool aims to provide more forecast certainty for planners and policy makers.
COT	DM2: Analyze effectiveness of City water harvesting ordinance – potential for expanded water and stormwater harvesting. (5.2)	**Carry-Over from 2013**. CITY LEAD
COT	DM 3: Benchmark study of water efficiency goals, success indicators and best management practices to inform regional dialogue. (2.1)	**Carry-Over from 2013**. CITY LEAD
PC	DM 4: Evaluate outdoor water use requirements, water budgeting methods, drought tolerant plant lists and appropriate watering practices for urban desert landscapes. Use results to inform development of more efficient and consistent outdoor water use standards and practices. (3.1)	**Carry-Over from 2013**. County lead. Update of general plant list and the buffer overlay zone plant list referenced in the Pima County landscape design manual planned though undetermined at this time; DSD also accepts Arizona Department of Water Resources (ADWR) low water plant list.

Program 2: Consistent Standards and Guidelines

Lead Jurisdiction	Action Plan Item	Status
PC	DM 5: Develop model City/County building code to reduce water/energy footprint in new and renovated	COMPLETED. County lead. DSD Net-Zero Energy Building Code adopted.

Lead Jurisdiction	Action Plan Item	Status
	buildings. (3.1)	
COT	DM 6: Expand City's ordinance related gray water education program to include guidelines and education on use of gray water outdoors. (3.1)	COMPLETED. CITY LEAD
PC	DM 7: Develop design guidelines for neighborhood stormwater harvesting to encourage the creation of habitat and water efficient landscapes. (5.1)	**Carry-Over from 2013** CONTINUING. County lead. RFCD evaluated Green Infrastructure/Low Impact Development features, identifying those achieving the best net social benefit, with the use of new economic and risk analysis tools. *AutoCASE* computes the social and environmental costs and benefits of a project. Benefits such as reduced energy costs, flood risk mitigation, property value uplift, heat stress mortality reduction, reduced air pollution and carbon emissions and reduced direct and social costs of water are monetized to provide a broader cost-benefit calculation. The project value can be better understood by various stakeholder groups with quantified analysis of all impacts. Combined with the Envision Rating System, infrastructure projects can earn credits towards certification, validating social and environmental benefits, similar to the LEED program. Completion of draft GI/LID Guidance Manual.
COT	DM 8: Develop commercial green building rating system to increase consistency and effectiveness of water and energy standards in commercial. (3.1)	**Starts 2014** CITY LEAD

Program 3: Education and Outreach

Lead Jurisdiction	Action Plan Item	Status
COT	DM 9: Work with regional utilities to develop coordinated and consistent demand management strategies, practices, surveys and messages. (2.1, 4.1, 4.2)	**Carry-Over from 2013**. CITY LEAD