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FOR IMMEDIATE RELEASE

Contact: Melaney Seacat, Pima County (520) 740-6517
Nicole Ewing Gavin, City of Tucson (520) 861-8893

WATER SUSTAINABILITY ACTION PLAN RELEASED FOR PUBLIC COMMENT

The City of Tucson and Pima County have completed a draft Water Sustainability Action Plan to implement the recommendations from the City/County Water and Wastewater Study. The public comment period on the Action Plan extends from September 16th to October 7th, 2010. Below are ways in which the public can review and comment on the Plan:

- Online: www.tucsonpimawaterstudy.com. The report will be posted on September 16th and comments can be submitted via the website.
- Printed copies are available at the Joel D. Valdez Main Library, 101 N. Stone Ave.
- Phone or email comments: (Melaney – can we give Brenda's number) or info@tucsonpimawaterstudy.com (is this still working and where does it go?).

The City/County Water and Wastewater Study was a multi-year effort to define and develop a sustainable water future for the Tucson region. The draft Water Sustainability Action Plan describes specific steps the City and County plan to take toward water sustainability over the next five years. The Action Plan will be presented to the Tucson Mayor and Council on October 26, 2010 and to the Pima County Board of Supervisors on November 2, 2010.

###

Brenda Garcia

From: Stephens, Daniel B. [dan.stephens@dbstephens.com]
Sent: Tuesday, September 21, 2010 1:49 PM
To: Brenda Garcia
Subject: Question on the May 2009 Technical Paper
Follow Up Flag: Follow up
Flag Status: Red

Hello,

I just read this excellent report dealing with the Water and Wastewater Infrastructure, Supply and Planning Study, Phase II. In Table 1, I noticed though that 'Capture', but not 'Recharge', is a best use of rainwater and storm water for both the " Built Environment" and the 'Future Development' scenarios. My primary question is: are there regulations or water rights issues in Tucson/Arizona which would preclude the use of rainwater or on-site storm water for *recharge* on a lot or within a development? Has the committee considered whether there could there be areas of the city where landscapes at new construction sites might be tailored to enhance recharge over evapotranspiration?

Thank you very much,
Dan Stephens

Brenda Garcia

From: Angie Gelsinon [angie@kaneenpr.com]
Sent: Friday, September 24, 2010 9:49 AM
To: Nicole Ewing-Gavin
Subject: FW: E-mail from TucsonPimaWaterStudy.com - Comments

This was a comment received last week - sorry for the delay, it was in my spam folder.

-----Original Message-----

From: noreply@tucsonpimawaterstudy.com
[mailto:noreply@tucsonpimawaterstudy.com]
Sent: Saturday, September 18, 2010 2:05 PM
To: info@tucsonpimawaterstudy.com
Subject: E-mail from TucsonPimaWaterStudy.com - Comments

Email Address: jedtaz@cox.net

Comments/Questions: 1) The Tucson Water Action Plan seems to place too much emphasis on riparian restoration projects. I recommend that such projects be de-emphasized. Even if the City/County gets federal grants to pay for the projects, the projects will still use considerable water resources. We should not waste water on beautification projects.

2) The aquifers in the Tucson and Avra valleys should be more thoroughly explored below the 1,200-foot level. These valleys may have considerable deep water. If significant new resources are found, we should study the feasibility of using that water relative to the cost of pumping and treatment to remove dissolved material.

3) Do not be concerned with greenhouse gas emissions. There is absolutely no proof that carbon dioxide has a significant role affecting global temperature. If you disagree with that statement, then I challenge you to produce some proof before incorporating emissions reduction regulations in the water plan.

4) Trying to protect the environment against climate change is trying to change the course of nature, a futile exercise. Adapt instead. There is no action the City could take that would make any difference.

5) How much CAVSARP water is lost through evaporation? Enough to cover the settlement ponds, and perhaps some of the CAP canal?

6) DO NOT make it mandatory that existing homes be retrofitted to conform to any new grey water or non-potable water regulations that may be promulgated. New construction, however, can be designed for these uses.

Jonathan DuHamel

Do you wish to receive emails and posted mail information from the Water Infrastructure, Supply and Planning Study?

Yes

Brenda Garcia

From: cstampigr@dakotacom.net [cstamping@dakotacom.net]
Sent: Thursday, September 30, 2010 10:03 AM
To: Brenda Garcia
Subject: The future
Follow Up Flag: Follow up
Flag Status: Red

Dear Jim Barry-as your water study draws to a temporary end,the future indicates a need for a Tucson Pima Energy study. Your knowledge from the water study can well be applied to energy. Should this be of interest to you,Stanford's latest methodology is availble for downloading upon receipt of an email address-Best clyde h stagner

DRAFT
09-16-2010

A City of Tucson
and Pima County
Cooperative Project



*Water & Wastewater
Infrastructure, Supply &
Planning Study*

City of Tucson/Pima County
**Action Plan
for Water Sustainability**

Water Supply

Demand
Management

Comprehensive
Integrated
Planning

Respect for
Environment



Summary of Comments on Acknowledgements

This page contains no comments

Acknowledgements

The contributions of the following people to the successful completion of the City of Tucson/Pima County Action Plan for Water Sustainability are greatly appreciated. This Action Plan fulfills the direction provided in the City and County Resolutions (No. 21478 and 2010-16 respectively) to define the actions to be taken next to implement the shared City/County goals and recommendations as described in the Phase 2 Water Study Report (December 2009).

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Paul Cunningham, Ward 2
Karin Uhlich, Ward 3
Shirley Scott, Ward 4
Richard Fimbres, Ward 5
Steve Kozachik, Ward 6

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Ramon Valadez, District 2
Sharon Bronson, District 3
Raymond J. Carroll, District 4
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This page contains no comments

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This page contains no comments

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Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 11:49:33 AM



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This page contains no comments

City of Tucson / Pima County Action Plan for Water Sustainability

Introduction

In April 2008 the City of Tucson and Pima County initiated a joint effort for sustainable water resource planning known as the “City/County Water and Wastewater Infrastructure, Supply and Planning Study” (Water Study). The City/County Water Study is a multi-year effort to identify ways the City and County, which respectively operate the region’s primary water and wastewater utilities, can work together to advance more cooperative and sustainable water planning.

After two years of intensive study and under the guidance of a joint City/County Citizens Advisory Committee (member list is available online at www.tucsonpimawaterstudy.com), City and County staff prepared the Phase 2 Water Study Report. The Phase 2 Report establishes a framework for sustainable water resources planning including 19 goals and 56 recommendations within four interconnected elements: Water Supply, Demand Management, Comprehensive Integrated Planning and Respect for Environment. A summary of the 19 City/County Phase 2 goals for water sustainability is provided below.

In February 2010, the City of Tucson Mayor and Council and the Pima County Board of Supervisors adopted the Phase 2 Report through separate but identical resolutions and directed staff to work together to create an Action Plan for implementing the Phase 2 goals and recommendations.

²The following Action Plan represents a dramatic shift in business as usual for the City and County. It advances a set of 87 specific actions grouped within 14 City/County programs to implement the Phase 2 goals and recommendations and to achieve the following outcomes within the five-year planning horizon:

- Water, wastewater and stormwater resources are planned in an integrated fashion
- More renewable water resources including effluent, reclaimed, stormwater, rainwater and graywater are put to use in an efficient manner
- Water resource policies help to further economic goals
- ³Collaborative efforts are undertaken to acquire new water, to achieve greater flexibility in use of existing supplies, and to align and enhance standards for water use efficiency
- Improved water quality resulting from regional wastewater treatment facility upgrades (i.e. the ROMP*) is matched to needs for recharge, environmental restoration and public amenities such as parks, golf courses and ball fields
- Land use, infrastructure and water resources planning are linked and foster optimum use of renewable water resource in future growth areas and increased water and energy efficiency outcomes in new development
- Water is allocated to environmental needs, sensitive riparian ecosystems are preserved and maintained, and cost-effective and collaborative environmental restoration projects are advanced
- ⁴Public values are considered in water resources planning and public awareness of the environmental and human benefits of increased water use efficiency is increased

* Regional Optimization Master Plan

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Author: oscargandy
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Author: oscargandy
Subject: Highlight
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Author: oscargandy
Subject: Highlight
Date: 10/05/2010 11:50:35 AM

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Author: oscargandy
Subject: Highlight
Date: 10/05/2010 11:51:08 AM

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City/County Phase 2 Goals for Water Sustainability

COMPREHENSIVE INTEGRATED PLANNING	RESPECT FOR ENVIRONMENT
<p>Encourage sustainable urban forms – <i>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.</i></p>	<p>Preserve existing riparian areas through coordinated regulation, policy, and outreach- <i>Pursue a coordinated approach to preserving existing riparian areas and foster increased public support of protection and maintenance of healthy ecosystems.</i></p>
<p>Direct growth to suitable growth areas – <i>Direct future growth suitable areas through infrastructure investments, policies, and open space acquisitions.</i></p>	<p>Identify needs and opportunities for future restoration – <i>Pursue a collaborative, comprehensive and systematic strategy to identify needs, opportunities, resources and partnerships to implement cost-effective regional environmental restoration.</i></p>
<p>Integrate land use and water resources planning - <i>Enhance efforts to link land use and water resources planning to foster increase use of renewable water resources in new development and to balance economic, environmental and human needs for water.</i></p>	<p>Ensure that public projects are multi-benefit including restoration, stormwater management, recharge and public amenity – <i>Maximize beneficial use of reclaimed water, rainwater and stormwater in flood control, water and wastewater treatment facilities and other capital projects.</i></p>
<p>Growth should pay for itself over time and be financially sustainable – <i>Ensure that the full cost of new development is considered and that growth related costs for water and wastewater are recovered.</i></p> <p></p>	<p>Ensure the future of riparian and aquatic habitat Along the effluent-dependent reach of the Santa Cruz River – <i>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.</i></p> <p>Develop water supply for the environment – <i>Ensure an adequate amount of water is available to meet the establishment  needs of restored habitats.</i></p> <p></p>

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Author: oscargandy

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 why is there such an emphasis, and assumption of the inevitability of growth. Further, what does it mean that growth should pay for itself. What do you mean by "full cost?" Does that include all the externalities associated with growth?

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Author: oscargandy

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Sequence number: 3

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:18:09 PM

 what is the meaning of this language "establishment needs"; and why limit it to "restored habitats." Can we say that we really have any restored habitats [restored to what point in history?]

City/County Phase 2 Goals for Water Sustainability (cont.)

WATER SUPPLY	DEMAND MANAGEMENT
 <p>Work collaboratively to acquire new water supplies for reliability - <i>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.</i></p>	<p>Increase the effectiveness of conservation programming through coordinated planning and evaluation – <i>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.</i></p>
<p>Maximize and make efficient use of effluent and other locally renewable water supplies - <i>Reduce use of groundwater for non-potable water needs through greater emphasis on locally-renewable resources such as reclaimed water, rainwater and graywater.</i></p>	<p>Establish common water conservation goals and targeted methods – <i>Develop shared goals to provide a foundation for increasing regional consistency and coordination.</i></p> 
 <p>Address regulatory barriers to maximizing local supplies – <i>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.</i></p>	 <p>Manage demand through the design of the built environment – <i>Incorporate consistent low water usage development standards into new construction and establish land forms that reduce the “water footprint” of the built environment.</i></p>
 <p>Foster increased use of reclaimed water- <i>Establish expansion targets, prioritize customers and create options for overcoming financial barriers to increased use of reclaimed water.</i></p>	<p>Manage demand through changing behaviors – <i>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.</i></p>
<p>Be prepared for climate change and drought- <i>Pursue adaptive, flexible, multi-pronged preparedness strategies including diversification of water supplies and improved demand management, such as increased reliance on water harvesting.</i></p>	<p>Increase the use of rainwater and stormwater – <i>Coordinate efforts, evaluate the benefits and maximize use of rainwater harvesting in order to meet outdoor needs, reduce demands on potable supplies, increase floodwater retention and limit migration of contaminants.</i></p>

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Sequence number: 1
Author: oscargandy
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 why aren't you addressing the potential shortages that will stem from the growth you seem to be assuming...

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Author: oscargandy
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Author: oscargandy
Subject: Note
Date: 10/05/2010 1:20:24 PM

 what are the actual goals here; consistency may not be a good thing: we don't want to be Phoenix, and perhaps not even Marana.

Sequence number: 4
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:23:16 PM

 again, the language is troublesome. What is the deal with this concern about consistency? What does it mean to "establish land forms?" Is this a regulatory target?

Sequence number: 5
Author: oscargandy
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 this one has the feel of a slippery slope; why are there regulatory barriers [what were they thinking?]

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Author: oscargandy
Subject: Highlight
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Sequence number: 7
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:24:04 PM

 are these barriers primarily financial, or are there other hurdles that have to be crossed?

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Author: oscargandy
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Author: oscargandy
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Action Plan Overview

The five year City/County Water Sustainability Action Plan spans from January 2011 to December 2015. It is a living plan that can be modified along the way as needed in response to changing conditions such as the evolution of a regional process for sustainable water planning. Inter-disciplinary teams of staff from the following City and County departments developed the Plan:

- City/County Administration
- City of Tucson, Tucson Water
- Pima County Regional Wastewater Reclamation Department
- City/County Sustainability Offices
- City/County Planning and Development Services Departments
- Pima County Regional Flood Control District
- Pima County Environmental Quality
- City/County Transportation Departments
- City/County Parks and Recreation Departments
- City of Tucson Department of Housing and Community Development

The Action Plan describes a range of activities with timelines to implement the goals and recommendations in the Phase 2 Report. Many of the recommendations and goals of the Phase 2 Report involved refinements or expansions to existing City and County programs. As such, the activities are organized within City/County programs to ensure that the action plan moves forward despite the resource constraints both the City and County are operating under due to the economic downturn. ¹The programs and activities are designed to be implemented within current resources. In some cases, additional resources would allow actions to be completed more quickly and would allow for an enhanced implementation, however ²the Plan does not rely on additional resources to move forward. Some activities have existing grant funding associated with them, and City and County staff will be pursuing additional partnerships and outside funding to support implementation of other activities.

A joint City/County Steering Committee comprised of lead staff will continue to meet on a quarterly basis to coordinate and oversee the Action Plan implementation. To track and measure progress, staff have included 11 indicators of success across the four elements. Over the next year, the Steering Committee will continue to meet to develop baselines and targets for the indicators. This will allow the development of an annual “City/County Report Card” on sustainable water planning. This annual report card will be developed and distributed to elected officials, citizen advisory committees and posted on the City/County Water Study website (www.tucsonpimawaterstudy.com), at the end of each year of the five year Action Plan.

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Author: oscargandy
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Author: oscargandy
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Author: oscargandy
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is this realistic?

Partnership Opportunities Stemming from Action Plan

Opportunities for partnerships are identified throughout the Action Plan and the City and County are committed to ensuring on-going public outreach and education through participation in regional efforts, updates to the City/County Citizen Advisory Committees and Planning Commissions, and maintenance of the City/County Water Study website.

A subset of 12 recommendations from the Phase 2 Report were tagged as being best suited for the regional process in the City and County Resolutions. In addition, there are a number of activities identified in the draft City/County Action Plan for Water Sustainability that will benefit from being implemented in partnership with the University of Arizona (UA), the Southern Arizona Water Users Association (SAWUA), Pima Association of Governments (PAG), the Arizona Dept. of Water Resources (ADWR) and other regional partners. Below are some examples of those activities.

Economic Collaboration

The economy, including the importance of water for economic base job creation, was an important theme throughout the Study. This is reflected in several activities in the Action Plan. Within the Comprehensive Planning element, an activity is included to improve regional partnerships toward economic base job creation within desired growth areas including center core revitalization.

Environmental Collaboration

The environment element relies heavily on collaboration and regional partnerships to address riparian restoration and preservation including the following activities: (1) coordinating for future bond funding to acquire riparian habitat for preservation; (2) establishing a working group to advance cost-effective, regionally coordinated environmental projects; (3) developing a coordinated riparian habitat preservation outreach program; and (3) extending reclaimed water lines to Vail to protect Cienega Creek.

Pumping Recharge Disconnect

The disconnect between where pumping of groundwater occurs and where it is recharged is a significant regional problem that will require a regional solution. The City and County will participate in the Safe Yield Task force and the emerging regional process for water sustainability to address the pumping /recharge disconnect. In addition, Tucson Water is working to implement wheeling agreements with other providers to deliver renewable wet water resources to areas that currently rely on groundwater.

Research and Evaluation

There is a need for better data collection to determine how best to direct efforts toward drought planning, water conservation programming, and groundwater and environmental monitoring. Better data can also be used to gauge the water conservation potential of new development and of specific measures such as water harvesting. This is considered an appropriate arena for engaging in a regional dialogue to improve the quality and usefulness of the data gathered, including engaging the UA and other expert stakeholders to advance uniform data collection.

More robust cost-benefit analysis tools are needed for future integrated resource planning and decision making to better account for environmental, energy, social preference and other impacts and trade-offs associated different supply and demand scenarios. The UA may be able to provide expertise in developing cost-benefit analysis tools.

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Sequence number: 1
Author: oscargandy
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Sequence number: 2
Author: oscargandy
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Date: 10/05/2010 1:27:00 PM



sounds good.

Sequence number: 3
Author: oscargandy
Subject: Highlight
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Sequence number: 4
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:27:57 PM



presumably this refers to a political solution.

Sequence number: 5
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:29:06 PM



how does new development "conserve" water? At best, it can consume it at a lower rate than it might otherwise.

Sequence number: 6
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:28:18 PM



Sequence number: 7
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:30:13 PM



Hopefully they will also be helpful in introducing distributional [equity] considerations into their modeling; we haven't seen too much of this in the past, however.

Water Conservation Goals and Education

Establishing measurable water conservation goals was identified as a regional item. The City and County have identified a benchmark study as an initial step to gather background information on measurable goals. UA may be interested in partnering on this effort. Related to this, a common glossary of terms and more consistent outreach, education and standard methods (e.g. for water harvesting and graywater use) are needed. SAWUA, Water Casa and ADWR are key partners in this effort.

Scenario Planning

The City and County envision holding a scenario planning forum with regional stakeholders and drought and climate change experts to further the Study’s goals related to climate change preparedness and drought planning. Imagine Greater Tucson is envisioned to be the primary vehicle for advancing regional land use scenario planning and modeling.



DRAFT

Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:31:13 PM



Sequence number: 2
Author: oscargandy
Subject: Note
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 probably shouldn't assume that land use will be among the core components of the scenarios that the conversations/surveys identify and pass forward to the scenario effort.

Comprehensive Integrated Planning

Introduction

The Phase 2 Report recognized that water and growth are connected in a variety of ways and that achieving a sustainable water future will require a rational plan for growth that addresses the form, location and cost of growth, as well as the efficient and sustainable allocation of water to serve growth. The Action Plan for Comprehensive, Integrated Planning includes 3 programs that aim to ensure the community grows in a rational and sustainable manner. The programs and activities proposed include long term and broad-based policies as well as shorter term tools and strategies.

The Phase 2 Report identified four goals and 12 recommendations to address the following key Water Study topics:

- City / County agreement on the location of future growth increment in 2050
- The influence of urban form, water and infrastructure planning on where this future population growth increment will occur
- Ensuring that this future growth in a manner that does not disadvantage or adversely impact existing residents or the environment, economy and conservation of our resources.

Programs to Address Phase 2 Goals and Recommendations

The Action Plan for Comprehensive Integrated Planning includes 22 discrete activities to implement the Phase 2 Goals and Recommendations. These activities are grouped into the following three City/County program areas:

1. General and Comprehensive Plan Updates
2. Smart Growth Tools and Regulations
3. Linking Water and Land Use Planning

PROGRAM 1: GENERAL AND COMPREHENSIVE PLAN UPDATES

The General Plan and the Comprehensive Plan are the major planning documents for the City and County respectively that guide land use, urban design, and many other public services and infrastructure investments. As required by State law, these plans need to be updated by 2015. The updates to these Plans provide an opportunity to influence future growth patterns in the region. In addition to updating the elements in the Plans in line with the Phase II Report, there are new aspects proposed to ensure the updated plans lead to actions such as an analysis of infrastructure and public facilities needs, designation of suitable growth areas and job centers, exploration of pre-zoning to encourage growth in line with the Plans, an infrastructure phasing plan, and an implementation component.

PROGRAM 2: SMART GROWTH TOOLS AND INCENTIVES

There are several specific activities that the City and County plan to undertake in addition to the longer term efforts to update the General and Comprehensive Plans. A sustainability audit of the City and County land use codes as well some specific amendments to the County Code are aimed at encouraging sustainable urban forms. There will also be efforts made through research and outreach to identify opportunities to promote mixed uses, well-designed density and infill. Terms of directing growth improvement districts will be evaluated as a tool to fund open space acquisition and the City will explore legislative changes to allow Transfer of Development rights from the unincorporated area to the City. The development of a fiscal sustainability model is proposed in order to understand the true costs and funding mechanisms to provide public services and infrastructure based on various land use patterns.

Page: 12

Sequence number: 1

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:34:23 PM

 very bad framing: serve growth? At best we might be talking about accommodating sustainable levels of growth.

Sequence number: 2

Author: oscargandy

Subject: Highlight

Date: 10/05/2010 1:33:20 PM

T

Sequence number: 3

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:36:18 PM

 sustainability is both present and future oriented. Although it is not always emphasized, it also includes equitable distribution of the benefits of sustainable development.

Sequence number: 4

Author: oscargandy

Subject: Highlight

Date: 10/05/2010 1:35:11 PM

T

Sequence number: 5

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:37:29 PM

 "influence" is a good and useful term. Are we clear about what we have in mind with regard to producing influence over growth?

Sequence number: 6

Author: oscargandy

Subject: Highlight

Date: 10/05/2010 1:36:49 PM

T

Sequence number: 7

Author: oscargandy

Subject: Highlight

Date: 10/05/2010 1:37:47 PM

T

Sequence number: 8

Author: oscargandy

Subject: Highlight

Date: 10/05/2010 1:38:47 PM

T

Sequence number: 9

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:38:29 PM

 whoops, is that a slip of the tongue? Didn't we just say influence growth [not necessarily the same as encouraging growth].

Sequence number: 10

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:39:43 PM

 even "directing" is better than encouraging growth.

Sequence number: 11

Author: oscargandy

Subject: Highlight

Comments from page 12 continued on next page

Comprehensive Integrated Planning

Introduction

The Phase 2 Report recognized that water and growth are connected in a variety of ways and that achieving a sustainable water future will require a rational plan for growth that addresses the form, location and cost of growth, as well as the efficient and sustainable allocation of water to serve growth. The Action Plan for Comprehensive, Integrated Planning includes 3 programs that aim to ensure the community grows in a rational and sustainable manner. The programs and activities proposed include long term and broad-based policies as well as shorter term tools and strategies.

The Phase 2 Report identified four goals and 12 recommendations to address the following key Water Study topics:

- City / County agreement on the location of future growth increment in 2050
- The influence of urban form, water and infrastructure planning on where this future population growth increment will occur
- Ensuring that this future growth occurs in a manner that does not disadvantage or adversely impact existing residents or the environment, economy and conservation of our resources.

Programs to Address Phase 2 Goals and Recommendations

The Action Plan for Comprehensive Integrated Planning includes 22 discrete activities to implement the Phase 2 Goals and Recommendations. These activities are grouped into the following three City/County program areas:

1. General and Comprehensive Plan Updates
2. Smart Growth Tools and Regulations
3. Linking Water and Land Use Planning

PROGRAM 1: GENERAL AND COMPREHENSIVE PLAN UPDATES

The General Plan and the Comprehensive Plan are the major planning documents for the City and County respectively that guide land use, urban design, and many other public services and infrastructure investments. As required by State law, these plans need to be updated by 2015. The updates to these Plans provide an opportunity to influence future growth patterns in the region. In addition to updating the elements in the Plans in line with the Phase II Report, there are new aspects proposed to ensure the updated plans lead to actions such as an analysis of infrastructure and public facilities needs, designation of suitable growth areas and job centers, exploration of pre-zoning to encourage growth in line with the Plans, an infrastructure phasing plan, and an implementation component.

PROGRAM 2: SMART GROWTH TOOLS AND INCENTIVES

There are several specific activities that the City and County plan to undertake in addition to the longer term efforts to update the General and Comprehensive Plans. A sustainability audit of the City and County land use codes as well some specific amendments to the County Code are aimed at encouraging sustainable urban forms. There will also be efforts made through research and outreach to identify opportunities to promote mixed uses, well-designed density and infill. Improvement districts will be evaluated as a tool to fund open space acquisition and the City will explore legislative changes to allow Transfer of Development rights from the unincorporated area to the City. The development of a fiscal sustainability model is proposed in order to understand the true costs and funding mechanisms to provide public services and infrastructure based on various land use patterns.

Date: 10/05/2010 1:39:18 PM



Sequence number: 12
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:40:01 PM



Sequence number: 13
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:40:23 PM



understanding true costs is a difficult, but worthy goal.

Comprehensive, Integrated Planning (cont.)

PROGRAM 3: LINKING WATER AND LAND USE PLANNING

The activities within this program seek to address the historic disconnect that has existed between land use planning and water resources and infrastructure planning. Wheeling and recharge agreements as well as participation in the Safe Yield Task Force are activities aimed at addressing the hydrological pumping/recharge disconnect and bring more renewable supplies to the region. Implementation of the City's new Water Service Area Policy and "water resource checkbook" will ensure that renewable water supplies are available for jobs and growth within City limits. Implementation of the County's Comprehensive Plan Water Policy Element and the proposed comprehensive water resource pilot study in the Southwest area will ensure that use of renewable water supplies and efficient water use is adequately planned for as part of new development in unincorporated Pima County.



DRAFT

Page: 13

Sequence number: 1
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:41:34 PM

 why are jobs and growth linked in this way?

Sequence number: 2
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:41:00 PM

T

Sequence number: 3
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:42:04 PM

T

Sequence number: 4
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:44:44 PM

 that is an unwarranted claim: the future is simply too uncertain to claim that it has been planned for. And to suggest that future use will be efficient as a result of planning is just, dare I say, silly?

What is the meaning of "efficient" in this context?

Comprehensive Integrated Planning

City/County Water Study Phase II Report / Resolution Nos. 21478 (City)/2010-16 (County)

Water Sustainability Goals and Recommendations

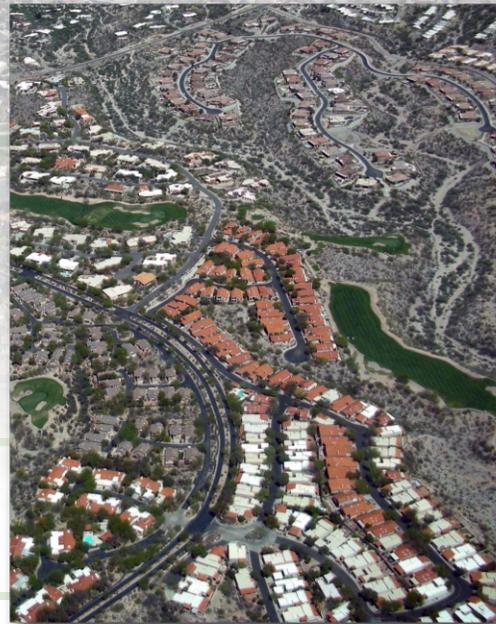


Photo by Daniel Lobo (CC)

Goal 1 Encourage sustainable urban forms

- 1.1 ¹ Require and encourage smart growth principles



Goal 2 Direct growth to suitable growth areas

- 2.1 ³ 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 ⁵ desired growth areas
- 2.3 Acquire open space to define ⁷ desired growth areas
- 2.4 Conduct regional growth scenario modeling



Goal 3 Integrate land use planning and water resources planning

- 3.1 Conduct comprehensive water resource planning outside of the obligated service area
- 3.2 Consider obligated service area expansion based on ⁸ 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

Goal 4 Growth should pay for itself over time and be financially sustainable

- 4.1 Put ¹⁰ 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



Page: 14

Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:45:02 PM



Sequence number: 2
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:46:37 PM



require and encourage?: certainly requirement would be enough [with some enforcement], but really, are "principles" what you are concerned about, or do you want to encourage/require those principles to be implemented?

Sequence number: 3
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:46:57 PM



Sequence number: 4
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:47:41 PM



this might be reframed to suggest that we will strictly limit future growth to four suitable areas....

Sequence number: 5
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:47:58 PM



Sequence number: 6
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:48:54 PM



again, rather than desired, we are [or ought to be] talking about areas in which we can accommodate limited growth.

Sequence number: 7
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:48:01 PM



Sequence number: 8
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:49:35 PM



Sequence number: 9
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:49:51 PM



is this an open gateway?

Sequence number: 10
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:50:15 PM



Sequence number: 11
Author: oscargandy
Subject: Note

Comprehensive Integrated Planning

City/County Water Study Phase II Report / Resolution Nos. 21478 (City)/2010-16 (County)

Water Sustainability Goals and Recommendations

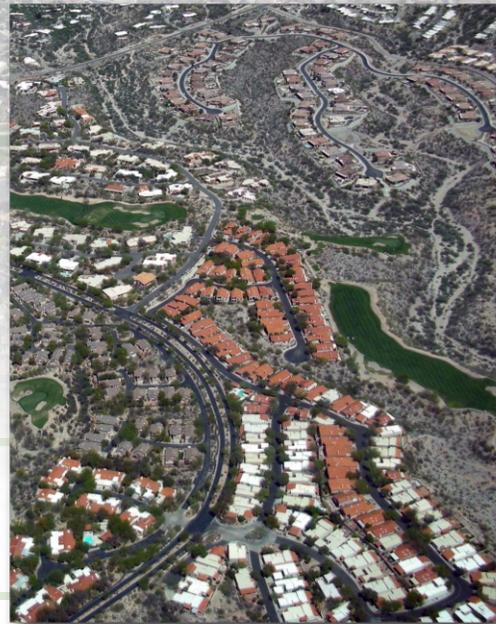


Photo by Daniel Lobo (CC)

Goal 1 Encourage sustainable urban forms

- 1.1 Require and encourage smart growth principles

Goal 2 Direct growth to suitable growth areas

- 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

Goal 3 Integrate land use planning and water resources planning

- 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

Goal 4 Growth should pay for itself over time and be financially sustainable

- 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

Date: 10/05/2010 1:50:48 PM

 have these been invented/marketed yet? If so, it's a well kept secret.

Comprehensive Integrated Planning Activities

PROGRAM 1: GENERAL AND COMPREHENSIVE PLAN UPDATES (Recommendations Addressed)		YEAR				
		2011	2012	2013	2014	2015
1	Analyze infrastructure and public facilities needs in preparation for updates to the Plans. (2.1)					Photo by Daniel Lobo (CC)
2	Update the Urban Form elements of the Plans to encourage smart growth and sustainable urban form. (1.1)					
3	Review and update Water Elements in Plans to ensure consistency with City/County Water Study recommendations and state requirements. (1.1)					
4	Explore policy to provide for pre-zoning in growth areas as part of updates to the Plans. (2.1)					
5	Identify and designate suitable growth areas in the updates to the Plans. (2.1)					
6	Identify and designate employment and job centers in the updates to the Plans. (2.1)					
7	Establish infrastructure and service phasing boundaries within growth areas. (2.2)					
8	Develop an implementation component for each of the Plans. (2.2)					
9	Link County Conservation Acquisition Program with updated Plans. (2.3)					
PROGRAM 2: SMART GROWTH TOOLS AND INCENTIVES						
10	Identify opportunities to promote mixed uses and well-designed density. (1.1)					
11	Revise County's Cluster Ordinance to improve water efficiency of new development. (1.1)					
12	Evaluate improvement districts as a tool to purchase natural areas/riparian habitat. (2.3)					
13	Work with TREO to advance public/private collaboration toward economic base job creation (employment with a multiplier effect) and urban revitalization, including ensuring that water resource policies are aligned with economic goals. (2.1)					
14	Conduct a Land Use Code sustainability audit to identify opportunities to encourage sustainable urban forms. (1.1)					
15	Explore conservation subdivision requirement in Conservation Land System (MBB) to better integrate new development into environmentally sensitive areas. (1.1)					
16	Identify and address barriers to infill. (2.1)					
17	Develop a fiscal sustainability model. (4.1)					
18	Explore City transfer of development rights (TDR) to help direct growth to suitable growth areas. (2.1)					
PROGRAM 3: LINKING WATER AND LAND USE PLANNING						
19	Continue wheeling negotiations between Tucson Water and other water providers to deliver more renewable supplies to the region. (3.4)					Photo by Daniel Lobo
20	Participate in the Safe Yield Task Force to address pumping recharge disconnect. (3.5)					
21	Implement Tucson Water Service Area Policy and annual water resource "checkbook balance" review. (3.2)					
22	Implement Pima County Water Resource Element to assess water resource impacts of new development. (3.3)					
23	Conduct a pilot study of integrated water resource planning in the Southwest area. (3.1)					

This page contains no comments

Comprehensive Integrated Planning

Accomplishments



Photo by Daniel Lobo (CC)

Below are some examples of previous accomplishments that support the Phase 2 Goals and Recommendations for Comprehensive Integrated Planning

City of Tucson Houghton Area Master Plan (HAMP) – Adopted June 7, 2005, the HAMP guides development in the Houghton Road corridor according to Smart Growth principles such as mixed use, compact, environmentally-sensitive, pedestrian/transit friendly designs, and cost effectiveness.

City of Tucson Sustainability Assessment – City of Tucson is utilizing “Energy Efficiency and Conservation Block Grant” funding to prepare a sustainability analysis of the Land Use Code and recommendations for revisions to address barriers within the Code to achieving sustainable development.

Incentives for Infill – In 2005 the City of Tucson enacted the Roadway Impact fee which establishes a discounted rate for the Central Benefit District to encourage infill in the urban core.

Pima County Southwest Infrastructure Plan (2007) – Establishes sustainability principles that guide land use policies and infrastructure investments to direct sustainable growth and development in the Southwest area. The Plan also provides infrastructure sustainability strategies and measurable implementation objectives.

Pima County Transfer of Development Rights (TDR) – Establishes statutory authority and a framework for inter-jurisdictional transfers of development rights providing new tools for environmental protection.

Indicators of Future Success



Photo by Xero-X (CC)

- *Percent increase in residential units/acre*
- *Percent increase in City/County Residential Building Permits issued within suitable growth areas*
- *Percent increase in total water used in suitable growth areas that comes from renewable water sources*

This page contains no comments

Respect for Environment

Introduction

 ¹Respecting the environment means recognizing that water is not only key to our continued economic expansion, it is also essential to a vibrant and healthy environment. There must be an appropriate balance between the reservation of water for consumption and growth, and the acknowledgment that our environment is a consumer of water resources and a healthy environment is essential to our long term well being. As a result, certain water reservations for the environment should be made and sustained.

The City and County began the Water Study with a baseline of shared policy goals for the environment reflecting a commitment to: (1) minimize additional loss of riparian habitat, (2) protect existing riparian  ⁴as against vulnerability to climate change and continuing human actions, and (3) where  ³circumstances allow, restore degraded ecosystems back to greater functionality.

The Phase 2 Report built upon this common policy framework for environmental protection and identified five goals and 13 recommendations to address the following key Water Study questions:

- How and where can we best use stormwater and rainwater, effluent and reclaimed water for environmental benefits and quality of life?
-  ⁵ What are the existing and future water demands for the environment and  ⁶ how should the community prioritize these needs?
- Why are environmental projects that improve ecosystem functions important?
- How and where can we best preserve and improve ecosystem functions?
- Where are future opportunities for environmental projects in proximity to existing and future water resources?
- What are the opportunities for protecting environmentally sensitive natural riparian areas, including areas of shallow groundwater and perennial and intermittent streams that support unique riparian vegetation, in Eastern Pima County?

Programs to Address Phase 2 Goals and Recommendations

The interdisciplinary City/County Action Plan team for Respect for Environment identified 26 discrete activities to implement the Phase 2 Goals and Recommendations. These activities are grouped into the following four City/County program areas:

1. **Collaboration for Environmental Restoration**
2. **Preservation and Protection of Riparian Areas**
3. **Incorporation of Multiple Benefit Features into Capital Improvement Projects**
4. **Development of a Lower Santa Cruz River Management Plan**

Page: 17

Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:52:33 PM



Sequence number: 2
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:55:12 PM



this is a terribly confused introductory paragraph. How can there be an balance between "reservation"and an "acknowledgement?"
And how can whatever that balance is supposed to be generate some "result?" The last statement is important, and something that this section might begin with, then moving to how we will accomplish it.

Sequence number: 3
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:55:41 PM



Sequence number: 4
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:56:21 PM



is that an empty container? (circumstances)

Sequence number: 5
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 1:56:43 PM



Sequence number: 6
Author: oscargandy
Subject: Note
Date: 10/05/2010 1:57:10 PM



hopefully those are among the compelling "circumstances" that will govern future policy.

Respect for Environment (cont.)

PROGRAM 1: COLLABORATION FOR ENVIRONMENTAL RESTORATION

Riparian habitat restoration in the region is influenced by various habitat conservation plans including the Pima County Multi-Species Conservation Plan and the City of Tucson's Habitat Conservation Plan. These plans encompass a variety of restoration needs, opportunities, and resources such as needs for 404 mitigation, options for in-lieu mitigation in compliance with local watercourse ordinances, availability of the Conservation Effluent Pool, and the existence of a Conserve to Enhance program. As a result, public and private agencies need to establish a regional direction, coordination and collaboration on riparian restoration. This will allow for a more cost-effective approach and greatest benefits. Water for the environment will go to regionally agreed-upon priorities.

PROGRAM 2: PRESERVATION AND PROTECTION OF RIPARIAN AREAS

The purpose of this program is to continue to support the acquisition of high quality riparian areas, while taking more active steps to address threats to the long-term quality of publicly owned lands. The program also focuses on the revision and/or implementation of policies and regulations in order to protect existing riparian habitat.

PROGRAM 3: INCORPORATION OF MULTIPLE BENEFIT FEATURES INTO CAPITAL IMPROVEMENT PROJECTS

The purpose of this program is to provide multi-benefit features in association with capital projects that have a dedicated water supply or that can accommodate water harvesting features. In addition to supporting the development of multi-benefit features in proposed recharge and wastewater reclamation facilities, this program is intended to result in the development of standards and guidance for the incorporation of multi-benefit features in future, but as yet unplanned, capital projects.

PROGRAM 4: REFINEMENTS TO LOWER SANTA CRUZ RIVER MANAGEMENT PLAN

The future of the lower Santa Cruz River is uncertain. Either too much effluent or too little effluent in the river can lead to erosion and/or environmental damages, yet it is important that effluent be reused as a valuable water resource. The purpose of this program is to develop a Management Plan for the Lower Santa Cruz River that addresses the preservation of habitat values currently present under various future effluent flow scenarios. Building upon the planning efforts undertaken as part of Tres Rios del Norte (TRDN), this program will focus on developing a more detailed resource assessment of the Lower Santa Cruz River, evaluating the impacts of various potential future effluent flow levels, and implementing pilot projects aimed at assessing options for maintaining habitat under changed future flows.

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Respect for Environment

*City/County Water Study Phase II Report /
Resolution Nos. 21478 (City)/2010-16
(County)*

Water Sustainability Goals and Recommendations

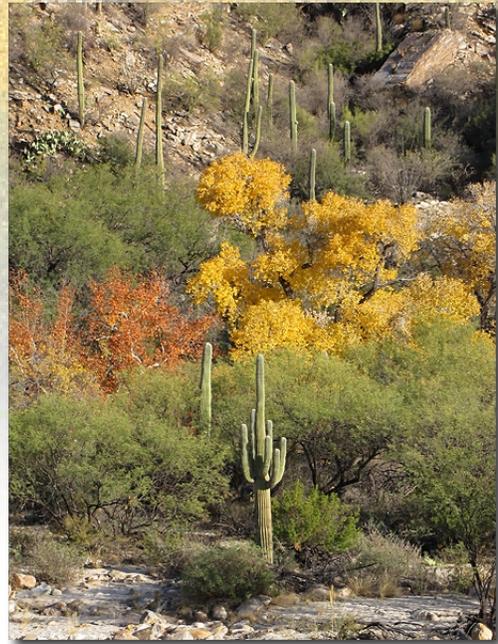


Photo by Searchnet Media (CC)



Goal 1 Preserve existing riparian areas through coordinated regulation, policy, and outreach

- 1.1 Continue preservation through acquisition, regulation, education and outreach
- 1.2 Address non-exempt wells and surface water diversions affecting riparian areas

Goal 2 Identify needs and opportunities for future 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

Goal 3 Ensure that public projects, are multi-benefit

- 3.1 Pursue multi-benefit public projects using reclaimed water
- 3.2 Pursue stormwater management opportunities in areas dominated by impervious surface

Goal 4 Ensure the future of riparian and aquatic habitat along the effluent- dependent reach of the Santa Cruz River

- 4.1 Advocate for changes to allow full recharge credit for Secretary 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-channel and off-channel recharge facilities features

Goal 5 Develop water supply for the environment

- 5.1 Finalize the IGA for the Conservation Effluent Pool
- 5.2 Link water conservation to environmental preservation/restoration

Sequence number: 1

Author: oscargandy

Subject: Note

Date: 10/05/2010 1:59:46 PM

 looks pretty good to me as goals and recommendations.

Respect for Environment Activities

PROGRAM 1: COLLABORATION FOR ENVIRONMENTAL RESTORATION (Recommendations Addressed)		YEAR				
		2011	2012	2013	2014	2015
1	Finalize the Conservation Effluent Pool (CEP) implementing agreement, establish City/County CEP Administrators and implement the CEP program. (5.1)					
2	Establish a Regional Restoration Working Group to inventory existing and potential resources, develop a list of criteria for prioritizing and selecting restoration projects and identify an initial list of projects that meet these criteria. (2.2)					
3	Inventory City and County lands to identify properties suitable for riparian restoration (2.2)					
4	Coordinate development of a volunteer-based stewardship program with Tucson Audubon Society pending their receipt of grant funding. (1.1)					
5	Continue to work with Tucson Audubon Society and the Army Corps of Engineers on a watershed-based approach to utilizing Audubon's, and potentially other entities', 404 in-lieu mitigation fees/funds. (2.1)					
6	Begin the development of outreach and educational materials to inform the community about the importance of riparian areas and continue to build awareness of and support for their protection and restoration. (1.1)					
7	Participate in the Conserve to Enhance (C2E) program to develop a funding source to acquire water supplies for environmental restoration. (5.2)					
PROGRAM 2: PRESERVATION AND PROTECTION OF RIPARIAN AREAS						
8	Adopt and implement Lee Moore Basin Management Plan to protect riparian habitat in a future growth area. (1.1)					
9	Adopt revised County riparian mitigation guidelines associated with their riparian habitat preservation ordinance. (1.1)					
10	Finalize City's new Riparian Area Protection Ordinance and seeks approval from Mayor and Council. (1.1)					
11	Identify ways to improve data sharing between the City and County and develop annual monitoring reports that address threats within shallow groundwater areas. (1.2)					
12	Apply for a County incidental take permit associated with their Multi-Species Habitat Conservation Plan and implement the Conservation Land System and associated guidelines. (1.1)					
13	Continue to develop the City Southlands Habitat Conservation Plan. (1.1)					
14	Inventory high-value riparian areas and develop a monitoring/management database. (1.1)					
15	Improve management of public lands through field assessments and where necessary implement remediation to address such things as trespassing and cleanup needs. (1.1)					
16	Develop response/management guidelines, including responsible agency, notification and response requirements, and follow-up needed to address threats to publicly owned lands. (1.1.)					
17	Pursue bond funding for acquisition of natural areas and riparian habitat, and for extension of reclaimed lines to Vail area (1.1 / 1.2)					
18	Finalize City Southlands Habitat Conservation Plan and applies for an incidental take permit. (1.1)					

Photo by SearchNet Media (CC)

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Respect for Environment Activities

PROGRAM 3: INCORPORATION OF MULTIPLE BENEFIT FEATURES INTO CAPITAL IMPROVEMENT PROJECTS		YEAR				
		2011	2012	2013	2014	2015
19	Develop a guidance document for retrofitting detention basins and develop a list of basins that offer opportunities for habitat restoration and/or recreation. (3.1)					
20	Retrofit Kolb Road detention basin for environmental restoration using stormwater as a demonstration project. (3.1)					
21	Develop a guidance document for multi-purpose design of parks including water harvesting, green development, and wildlife habitat to compliment the recreational features and reduce future operational costs. (3.1)					
22	Develop a joint policy that incorporates rainwater harvesting, stormwater detention, non-potable water use, recreation, and ecological amenities to the extent feasible in Capital Improvement Project budgets. (3.1)					
PROGRAM 4: REFINEMENT OF LOWER SANTA CRUZ RIVER MANAGEMENT PLAN						
23	Finalize Tres Rios del Norte (TRDN) Feasibility Study which will provide a broad concept for restoration along the Santa Cruz River, and then review the various alternatives with the Restoration Working Group to identify local priority projects to evaluate further. (4.2)					
24	Develop refined estimates of evapotranspiration and infiltration along the effluent dominated reach of the Santa Cruz River. (4.2)					
25	Construct an environmental restoration project in a former gravel pit using effluent flowing in the river from Roger Road, as well as tributary stormwater flows, to evaluate how to best manage habitat to transition from effluent dependent to using stormwater harvesting as a water source. (4.3)					
26	Conduct scenario planning to evaluate, under different effluent flow scenarios, options for maintaining riparian and aquatic habitat along the river. (4.2)					

Photo by SearchNet Media (CC)

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Respect for Environment

Accomplishments



Photo by Searchnet Media (CC)

Below are some examples of previous accomplishments that support the Phase 2 Goals and Recommendations for Respect for Environment

The Sonoran Desert Conservation Plan (SDCP) – Diverse interests across the region came together through the SDCP planning process to identify which natural areas and cultural sites in Pima County are most important to conserve, and which areas are more suitable for development.

In 2004, Pima County voters approved \$163 million to implement the SDCP resulting in the purchase to date of over 47,000 acres of land including critical riparian habitat and areas that provide significant ground water recharge to the Tucson basin.

Multi-Benefit Projects - The County and City have both incorporated multi-benefit features, including restoration/habitat enhancement in previous capital projects. Examples include Kino Detention Basin, Sweetwater Recharge/Wetland Facility, the High Plains Recharge Project, and Southern Avra Valley Storage and Recovery Project (SAVSARP). There are, however, opportunities that may have been, or may in the future be missed without a clear commitment to and guidelines for incorporating multi-benefit features into these types of projects.

The Conservation Effluent Pool Intergovernmental Agreement (IGA) has been created that allocates up to 10,000 acre feet of effluent for environmental restoration. A draft implementing IGA is in process.

Indicators of Future Success



Photo by Xero-X (CC)

- *Increase in acres of riparian habitat permanently preserved*
- *Increase in acres of riparian habitat restored*
- *Percent increase in non-regulatory CIP Project budgets to fund multiple benefits such as restoration, water harvesting, or public amenity*

This page contains no comments

Water Supply



Introduction

Key elements of a sustainable water future include: appropriately managing current water resources to protect public health and safety; assuring that water resources are renewable, balanced with demand, reliable, and efficiently used; and securing additional water supplies for the future. With climate change and drought potentially affecting water demand and supply, we need to act conservatively and responsibly to manage our water resources. We need to diversify our water resource portfolio so that we are not overly dependent on imported water that is vulnerable to shortage. We should increase conservation and maximize our use and re-use of renewable, locally-generated water sources. A comprehensive approach to sustainability must also recognize that protecting, preserving and, where feasible, improving water quality is a principal objective. While effluent is a significant component of the region's renewable supply, higher quality effluent renders it a more flexible resource that strengthens sustainability.

In Phase 2 of the Water Study staff evaluated the following questions related to water supply:

- How regional collaboration can potentially facilitate securing additional renewable water resources as befits their respective missions
- What could be done to ensure that the long-term future water supply is not acquired at the expense of our current residents or the environment
- How the City and County can work together to increase the use of reclaimed or recycled water for turf irrigation to reduce groundwater pumping
- How the City and County can ensure the strict compliance with water quality requirements in the region and how they are preparing for future regulatory requirements for emerging contaminants

Programs to Address Phase 2 Goals and Recommendations

The interdisciplinary City/County Action Plan team for Water Supply identified 30 discrete activities to implement the Phase 2 Goals and Recommendations. These activities are grouped into the following four City/County program areas:

1. **Water Supply and Water Quality**
2. **Effluent Management**
3. **Regulatory / Policy Advocacy for Effluent/Reclaimed Water, Stormwater and Graywater**
4. **Drought Preparedness**

PROGRAM 1: WATER SUPPLY AND WATER QUALITY

While there is not an immediate supply issue, it is prudent that Tucson Water secure new, renewable water resources in order to assure future reliability of our water resource portfolio. This effort is particularly important in the face of potential impact of extended drought and climate change on both the Colorado River watershed and local conditions. Action to bolster our water supply should include maximizing use of locally renewable water resources such as stormwater harvesting, rainwater harvesting and graywater use.



Effluent is a significant component of the region's renewable water supply, but it is also a source of discharge of trace levels of emerging contaminants for which no regulatory standards have been set. Tucson Water protects drinking water sources with a "multiple barrier approach." Through substantial planned wastewater facility improvements, the Regional Wastewater Reclamation Department is enhancing effluent water quality. Both Tucson Water and Pima County must remain vigilant about water quality to protect and preserve existing and future water supply sources.

Page: 23

Sequence number: 1
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:00:40 PM
 very nicely said.

Sequence number: 2
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:00:29 PM


Sequence number: 3
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:01:05 PM


Sequence number: 4
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:01:58 PM


Sequence number: 5
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:03:13 PM
 In the absence of regulatory standards, precautionary principles should be developed and applied.

Sequence number: 6
Author: oscargandy
Subject: Cross-Out
Date: 10/05/2010 2:03:32 PM


Water Supply (cont.)

PROGRAM 2: EFFLUENT MANAGEMENT

Tucson Water has constructed an extensive reclaimed system over the past 25 years. The use of reclaimed water must be considered within the broader context of sustainability with the goal of maximizing our water resource portfolio as a community. While reclaimed water is an important tool for putting effluent to use, there are multiple valued uses for effluent, and these uses should be maintained over time. 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. The key is matching up the most effective and **resource-efficient** water source with the needs of a particular site.



PROGRAM 3: REGULATORY ADVOCACY FOR EFFLUENT/RECLAIMED WATER, STORMWATER AND GRAYWATER

The Arizona Department of Water Resources (ADWR) and Arizona Department of Environmental Quality (ADEQ) regulate the use of effluent, reclaimed water, stormwater, and graywater. It is important that appropriate standards are in place to protect public health and the environment. At the same time, water regulations need to be aligned with sustainability objectives in order to foster increased use of renewable water supplies. Staff should participate in, and advocate for, state initiatives that address regulatory barriers to maximizing local supplies.

PROGRAM 4: DROUGHT PREPAREDNESS

Uncertainty about the impacts of climate change and prolonged drought require that an adaptive, flexible and regularly updated scenario planning approach be in place. A multi-pronged preparedness strategy can lead the community to become more resilient in the face of a variety of potential future water resource scenarios. This program will ensure the community is prepared for the water resource impacts resulting from climate change and drought and that adaptive strategies are in place.

Sequence number: 1
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:04:53 PM

 this still reads like a code word, rather than any kind of binding constraint or source of guidance.

Sequence number: 2
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:04:17 PM



Water Supply

*City/County Water Study Phase II Report /
Resolution Nos. 21478 (City)/2010-16
(County)*

Water Sustainability Goals



Photo by US Bureau of Reclamation

Goal 1 Work collaboratively to acquire new water supplies for reliability

- 1.1 Maximize opportunities to acquire ADD water supplies through regional cooperation
- 1.2 Acquire additional supplies to buttress Tucson Water's CAP allocation and serve growth in the obligated service area
- 1.3 ¹ Consider all costs and benefits in the acquisition of new supplies



Goal 2 Maximize and make efficient use of effluent and other locally renewable water supplies

- 2.1 Balance uses of effluent - reclaimed, environment and aquifer recharge
- 2.2 Continue to implement ROMP improvements
- 2.3 Stay vigilant about water quality ³
- 2.4 Evaluate reclaimed expansion from the efficiency and overall water resource portfolio perspectives
- 2.5 Continue to evaluate graywater expansion
- 2.6 Continue to encourage rainwater harvesting

Goal 3 Address regulatory barriers to maximizing local supplies

- 3.1 Address groundwater credits to provide incentives to convert to reclaimed
- 3.2 Move to Class A+ water for the reclaimed system
- 3.3 Work with ADEQ and ADWR regarding water quality standards for riparian projects

Goal 4 Foster increased use of reclaimed water

- 4.1 Expand financing options
- 4.2 Maintain private payer and explore pricing incentives to encourage conversion
- 4.3 Lower operating cost through efficiencies
- 4.4 Consider reclaimed water in new developments
- 4.5 Consider other uses of reclaimed water for municipal and environmental supply needs
- 4.6 Increase the amount of effluent dedicated to reclaimed
- 4.7 Attract additional reclaimed customers based on efficiency considerations and benefits

Goal 5 Be prepared for climate change and drought

- 5.1 Continue multi-pronged planning approach
- 5.2 Use scenario planning

Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:05:58 PM



Sequence number: 2
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:07:06 PM

 now there's a big order. Have we any examples of best practices exemplars who have come close to meeting this standard of comprehensiveness? {all costs and benefits.....?}

Sequence number: 3
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:07:53 PM

 including rising salinity of ground water....

Water Supply Activities

PROGRAM 1: WATER SUPPLY AND WATER QUALITY (Recommendations Addressed)		YEAR				
		2011	2012	2013	2014	2015
1	Acquire new water supplies through Project ADD Water. (1.2)					
2	Identify future water needs for Tucson Water in the 2050 Tucson Water Plan. (1.2)					
3	Provide updates to Mayor and Council, Board of Supervisors, Citizens' Water Advisory Committee and Regional Wastewater Reclamation Advisory Committee on research and regulation related to water quality. (2.3)					
4	City purchases full City of Tucson CAP allocation and increases recharge. (1.3)					
5	Update 2050 Tucson Water Plan to consider costs, benefits, and tradeoffs of acquiring new water supplies including costs of Project ADD Water in the 2050 Tucson Water Plan Update. (1.3)					
PROGRAM 2: EFFLUENT MANAGEMENT						
6	Incorporate reclaimed, environmental and aquifer recharge uses into Tucson Water's Effluent Master Plan. (2.1)					
7	Develop a joint recharge project in the Southeast Area (Proposed: Joint Southeast/Houghton Area Recharge Project [SHARP]). (2.1)					
8	Expand Sweetwater Recharge Facility. (2.1)					
9	Cooperate with the Bureau of Reclamation to develop demonstration recharge projects in the Santa Cruz River. (2.1)					
10	Implement Regional Optimization Master Plan (ROMP) improvements to Pima County's metropolitan wastewater reclamation facilities. (2.2)					
11	Maximize beneficial use of City's effluent and assess the potential to convey other party's effluent entitlements to enable beneficial use region-wide through Tucson Water's Effluent Master Plan efforts. (2.4)					
12	Assess impacts of graywater on sewer system. (2.5)					
13	Identify and assess a range of practical incentives, including improved water quality to encourage more customers to hookup to the City's reclaimed water system in the preparation of the Tucson Water Effluent Master Plan. (3.2)					
14	Pursue bond funding for reclaimed water system expansion benefitting public use projects. (4.1)					
15	Assess the possibility of creating price incentives to encourage expanded reclaimed water use in the preparation of the Tucson Water Effluent Master Plan. (4.2)					
16	Increase reclaimed water system efficiencies through preparation of Tucson Water Effluent Master Plan. (4.3)					
17	Consider reclaimed water in new developments through updating of the General Plan and Comprehensive Plan(s) . (4.4)					
18	Evaluate the feasibility of extending the reclaimed infrastructure to County Parks. (4.5)					
19	Evaluate the feasibility of extending the reclaimed infrastructure to City Parks. (4.6)					
20	Prepare effluent plan for use of County share of effluent. (4.6)					
21	Identify additional reclaimed water customers. (4.7)					

This page contains no comments

Water Supply Activities

PROGRAM 3: REGULATORY/POLICY ADVOCACY FOR EFFLUENT/RECLAIMED WATER, STORMWATER AND GRAYWATER		YEAR				
		2011	2012	2013	2014	2015
22	Advocate for regulatory changes that will expand the use of graywater through participation in Blue Ribbon Panel. (2.5)					
23	Advocate that Arizona Dept. of Environmental Quality recognize rainwater harvesting and green infrastructure as stormwater management Best Management Practices through participation in Blue Ribbon Panel. (2.6)					
24	Advocate for change in Arizona Dept. of Water Resources policy to provide Groundwater Savings Facilities credits for turf irrigation through participation in Blue Ribbon Panel. (3.1)					
25	Advocate for numeric rather than technology-based standards for reclaimed water through participation in Blue Ribbon Panel. (3.2)					
26	Seek flexibility in water quality standards and permitting for riparian enhancement and environmental restoration projects using reclaimed water through participation in Blue Ribbon Panel. (3.3)					
27	Advocate for change in regulations to allow remediated groundwater in reclaimed water system through participation in Blue Ribbon Panel. (4.5)					
PROGRAM 4: DROUGHT PREPAREDNESS						
28	Update Tucson Water Plan 2050 to include multi-pronged approach for drought preparedness. (5.1)					
29	Update City of Tucson Water Department Drought Preparedness and Response Plan. (5.2)					
30	Update Pima County Drought Management Plan. (5.2)					

This page contains no comments

Water Supply

Accomplishments



Photo by Daniel Lobo (CC)

Below are some examples of previous accomplishments that support the Phase 2 Goals and Recommendations for Water Supply

Shift from Groundwater to Renewable Water Resources – The construction of Tucson Water's CAVSARP and SAVSARP recharge and recovery facilities has resulted in delivery of 60% of its CAP allocation and a corresponding reverse in the declines of groundwater levels in the central basin.

Tucson Water 2000-2050 Water Resources Plan – Provides an integrated resource plan addressing a range of scenarios, current and potential future supplies, demand management strategies and projected demand.

The Pima County Comprehensive Plan Amendment for Water Resources – Requires new development at the Rezoning and Comprehensive Plan Amendment stages to provide pertinent information on water resource impacts, supply sources and water conservation measures.

Indicators of Future Success



Photo by Xero-X (CC)

- *Increase in amount of reclaimed water delivered*
- *Increase in amount of effluent recharged in constructed or managed recharge facilities*
- *Increase in amount of CAP recharged in Tucson area recharge facilities or in Groundwater Savings Facilities*

This page contains no comments

Demand Management

Introduction

The Phase 2 Report recognized that Tucson Water has a long history of high profile, diverse water conservation programming in the region which has contributed to a strong water conservation ethic locally and to sustained reductions in per capita water use over the past three decades. Going forward, it will be important to establish ¹economic thresholds to consider in analyzing cost benefit impacts of demand management programs, but also the fiscal, environmental and ³social tradeoffs associated with demand management and water supply options.

The Phase 2 Report identified five goals and 9 recommendations to address the topics identified in the Water Study Scope of Work which were to identify ways to 1) Improve consistency of standards and ordinances; and 2) Ensure that water conservation protects future supplies and does not simply make population growth possible.

Programs to Address Phase 2 Goals and Recommendations

The interdisciplinary City/County Action Plan team for Demand Management identified 9 discrete activities to implement the Phase 2 Goals and Recommendations. These activities are grouped into the following three City/County program areas:

1. **Planning and Evaluation**
2. **Consistent Standards and Guidelines**
3. **Education and Outreach**

PROGRAM 1: PLANNING AND EVALUATION

The programs and activities in the Action Plan for Demand Management include an emphasis on data collection to understand water conservation potential, costs and benefits of different demand management measures such as water harvesting, and ⁴public values and awareness of the benefits of water conservation.

PROGRAM 2: CONSISTENT STANDARDS AND GUIDELINES

The design of the built environment has a significant impact on long-term water usage rates. Increased emphasis on common standards for water efficient technology and design in new development is a priority.

PROGRAM 3: OUTREACH AND EDUCATION

Tucson Water has significant outreach and education programs in place. ~~Tucson Water has significant outreach and education programs in place.~~ ⁶ Tucson Water has significant outreach and education programs in place. Going forward the City and County are committed to increasing consistency in water conservation information and education programming. Drought messaging must be developed that incorporates a regional theme, without hindering individual utilities ability to act appropriately. These are areas with opportunity for partnerships with other jurisdictions and water providers.

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Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:10:02 PM



Sequence number: 2
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:10:30 PM
 and distributional impacts....

Sequence number: 3
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:10:51 PM



Sequence number: 4
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:11:30 PM



Sequence number: 5
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:12:22 PM
 are those demand management measures?
[they are certainly influences, but clearly they are under-specified]

Sequence number: 6
Author: oscargandy
Subject: Cross-Out
Date: 10/05/2010 2:12:56 PM



Demand Management

*City/County Water Study Phase II Report /
Resolution Nos. 21478 (City)/2010-16
(County)*

Water Sustainability Goals and Recommendations



Photo by Dr. Starbuck (CC)

Goal 1 Increase the effectiveness of conservation programming through coordinated planning and evaluation

- 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 programming
- 1.3 Employ adaptive planning approach to drought preparedness



Goal 2 Establish common water conservation goals and targeted methods

- 2.1 Establish regional, measurable water efficiency and conservation goals
- 2.2 Develop regional water conservation approaches

Goal 3 Manage demand through design of the built environment

- 3.1 Review development regulations for consistency and improved potable water conservation

Goal 4 Manage demand through changing behaviors



- 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

Goal 5 Increase the use of rainwater and stormwater to reduce demands on potable supplies

- 5.1 Develop design guidelines for neighborhood stormwater harvesting
- 5.2 Analyze expanded water and stormwater harvesting potential and benefits

Sequence number: 1
Author: oscargandy
Subject: Highlight
Date: 10/05/2010 2:13:32 PM



Sequence number: 2
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:13:53 PM



remind yourselves what that really means...

Sequence number: 3
Author: oscargandy
Subject: Note
Date: 10/05/2010 2:14:40 PM



how will you address equity/distributional concerns that must arise in this context?

Demand Management Activities

PROGRAM 1: PLANNING AND EVALUATION (Recommendations Addressed)		YEAR				
		2011	2012	2013	2014	2015
1	Collect data on current conditions to provide a foundation for assessing potential to reduce the water/energy footprint of new development, and work with regional water utilities to identify opportunities for uniform data collection. (1.1)					
2	Analyze the effectiveness of City of Tucson water harvesting ordinance as well as the overall potential for expanded water and stormwater harvesting (5.2.)					
3	Conduct a benchmark study of water efficiency goals, success indicators and best management practices to inform regional dialogue. (2.1)					
4	Evaluate outdoor water use requirements, water budgeting methods, drought tolerant plant lists and appropriate watering practices for urban desert landscapes, and use results to inform development of more efficient and consistent outdoor water use standards and practices. (3.1)					
PROGRAM 2: CONSISTENT STANDARDS AND GUIDELINES						
5	Develop a model City/County building code to reduce the water/energy footprint in new and renovated buildings. (3.1)					
6	Expand City's ordinance-related graywater education program to include guidelines and education on use of graywater outdoors. (3.1)					
7	Develop design guidelines for neighborhood stormwater harvesting to encourage the creation of habitat and water efficient landscapes. (5.1)					
8	Develop a commercial green building rating system to increase the consistency and effectiveness of water and energy efficiency standards in the commercial sector. (3.1)					
PROGRAM 3: OUTREACH AND EDUCATION						
9	Work with regional water utilities to develop coordinated and consistent demand management strategies, practices, surveys and messages. (2.1 / 4.1 / 4.2)					

Photo by Dr. Starbuck (CC)

This page contains no comments

Demand Management

Accomplishments



Photo by Dr. Starbuck (CC)

Below are some examples of previous accomplishments that support the Phase 2 Goals and Recommendations for Demand Management

Tucson Water's Community Conservation Task Force (CCTF) recommended a plan based on cost benefit analysis for enhanced water use efficiency programs with a focus on technology. The CCTF recommendations to Mayor and Council resulted in the development of a conservation fee to fund Tucson Water's conservation programs.

The City of Tucson Water Harvesting and Graywater Ordinances – Adopted in 2008, these ordinances mandate that new commercial development utilize water-harvesting practices to meet 50% of the site landscape water requirement and dual plumbing to allow for graywater system installation in new homes.

Pima County 2006 and 2007 Water Conservation Code Amendments – Requirements now in place for waterless urinals and automatic faucets in commercial buildings, sub-water meters in multi-family construction, pool covers for new pools and use of reclaimed water for new golf courses. In new construction, separate reclaimed-ready irrigation plumbing and irrigation with seasonal adjustments and rain sensors are required and restrictions on large water fountains and water features and turf areas are in place.

Pima County Green Building and LEED Certification programs were established in 2008 promoting the construction of sustainable homes.

Indicators of Future Success



Photo by Xero-X (CC)

- *Increase in public awareness that conserving water resources helps maintain water supplies for both environmental and human needs.*
- *Decreasing trends in residential water use in new developments.*

This page contains no comments

Appendix A

Interconnectedness of Action Plan Elements

The four elements of Comprehensive Integrated Planning (CIP), Respect for Environment (RFE), Water Supply (WS) and Demand Management (DM) are strongly interconnected. As such, activities to address one recommendation in many cases also address cross-linked recommendation(s) in a different element. To minimize redundancy, the Action Plans for each element list activities only once. The table below depicts key activities that address multiple recommendations:

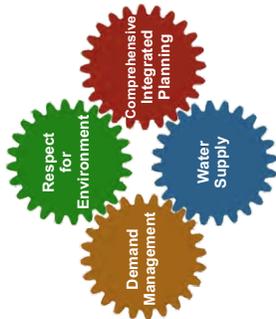
<i>Cross Linked Activities and Recommendations</i>	
Activity	Recommendations Addressed
<i>CIP Activity No.13:</i> Conduct a Land Use Code sustainability audit to identify opportunities to encourage sustainable urban forms (CIP 1.1)	<i>CIP Recommendation 1.1:</i> Require and Encourage Smart Growth Principles
<i>CIP Activity No. 11:</i> Revise County’s Cluster Ordinance to improve water efficiency of new development	<i>DM Recommendation 3.1:</i> Review Development Regulations for consistency and improved potable water conservation
<i>CIP Activity No. 2:</i> Update the urban form elements of the Comprehensive and General Land Use Plans (Plans) to encourage smart growth and sustainable urban form	
<i>CIP Activity No. 9:</i> Link County Open Space Bond Program with updated Plans	<i>CIP Recommendation 2.3:</i> Acquire open space to define desired growth areas <i>RFE Recommendation 1.1:</i> Continue (riparian) preservation through acquisition, regulations, education, and outreach
<i>CIP Activity No. 14:</i> Explore conservation subdivision requirement in Maeveen Beehan-Conservation Lands Systems to better integrate new development into environmentally sensitive areas.	<i>CIP Recommendation 1.1:</i> Require and Encourage Smart Growth Principles <i>RFE Recommendation 1.1:</i> Continue (riparian) preservation through acquisition, regulations, education, and outreach
<i>CIP Activity No. 17:</i> Explore City Transfer of Development Rights (TDR) to help direct growth to suitable growth areas.	<i>CIP Recommendation 2.1:</i> Encourage growth in four (4) suitable growth areas / existing built environment as highest priority <i>RFE Recommendation 1.1:</i> Continue (riparian) preservation through acquisition, regulations, education, and outreach
<i>CIP Activity No. 12:</i> Evaluate Improvement Districts as a tool to purchase open space.	<i>CIP Recommendation 2.3:</i> Acquire open space to define desired growth areas <i>RFE Recommendation 1.1:</i> Continue (riparian) preservation through acquisition, regulations, education, and outreach
<i>DM Activity No 1:</i> Collect data on current conditions to assess potential to reduce the water/energy footprint of new development. Work with regional water utilities to identify opportunities for uniform data collection.	<i>DM Recommendation 1.1:</i> Collect uniform data on water use patterns to identify conservation potential <i>CIP Recommendation 1.1:</i> Require and Encourage Smart Growth Principles

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Appendix A

<i>Cross Linked Activities and Recommendations</i>	
Activity	Recommendations Addressed
<i>DM Activity No. 4:</i> 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.	<p><i>DM Recommendation 3.1:</i> Review Development Regulations for consistency and improved potable water conservation</p> <p><i>CIP Recommendation 1.1:</i> Require and Encourage Smart Growth Principles</p>
<i>DM Activity No. 2:</i> Analyze the effectiveness of City of Tucson water harvesting ordinance as well as the overall potential for expanded water and stormwater harvesting	<p><i>DM Recommendation 5.2:</i> Analyze expanded water and stormwater harvesting potential and benefits</p> <p><i>RFE Recommendation 3.2:</i> Pursue stormwater management opportunities in areas dominated by impervious surfaces</p>
<i>DM Activity No. 2:</i> Analyze the effectiveness of City of Tucson water harvesting ordinance as well as the overall potential for expanded water and stormwater harvesting.	<p><i>DM Recommendation 4.2:</i> Analyze expanded water and stormwater harvesting potential and benefits</p> <p><i>RFE Recommendation 3.2:</i> Pursue stormwater management opportunities in areas dominated by impervious surfaces</p>
<i>DM Activity No. 7:</i> Develop design guidelines for neighborhood stormwater harvesting to encourage the creation of habitat and water efficient landscapes	<p><i>DM Recommendation 5.1:</i> Develop design guidelines for neighborhood stormwater harvesting</p> <p><i>RFE Recommendation 3.2:</i> Pursue stormwater management opportunities in areas dominated by impervious surfaces</p>
<i>DM Activity No. 5:</i> Develop a model City/County building code to reduce the water/energy footprint in new and renovated buildings.	<p><i>DM Recommendation 3.1:</i> Review Development Regulations for consistency and improved potable water conservation</p> <p><i>CIP Recommendation 1.1:</i> Require and Encourage Smart Growth Principles</p>
<i>WS Activity No. 27:</i> Update Tucson Water Plan 2050: Multi-pronged approach for drought preparedness	<p><i>WS Recommendation 5.1:</i> Continue multi-pronged planning approach</p> <p><i>DM Recommendation 1.3:</i> Employ Adaptive Planning Approach to Drought Preparedness</p>

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PROGRAMS ADDRESSING MULTIPLE GOALS

GOALS	COMPREHENSIVE INTEGRATED PLANNING			RESPECT FOR ENVIRONMENT			WATER SUPPLY			DEMAND MANAGEMENT				
	Program 1: General and Comprehensive Plan Updates	Program 2: Smart Growth Tools and Regulations	Program 3: Linking Water and Land Use Planning	Program 1: Collaboration for Environmental Restoration	Program 2: Preservation and Protection of Riparian Areas	Program 3: Creating Multi-benefit Public Projects	Program 4: Lower Santa Cruz River Management Plan	Program 1: Water Supply and Water Quality	Program 2: Effluent Management	Program 3: Regulatory Policy Advocacy	Program 4: Drought Preparedness	Program 1: Planning and Evaluation	Program 2: Consistent Standards and Guidelines	Program 3: Outreach and Education
COMPREHENSIVE INTEGRATED PLANNING														
Encourage sustainable urban form														
Direct growth to suitable growth areas														
Integrate land use and water resources planning														
Growth should pay for itself over time and be financially sustainable														
RESPECT FOR ENVIRONMENT														
Preserve existing riparian areas through coordinated regulation, policy, and outreach														
Identify needs and opportunities for future restoration														
Incorporate water harvesting and habitat creation in public and private projects														
Ensure the future of riparian and aquatic habitat along the effluent-dependent reach of the Santa Cruz River														
Develop water supply for the environment														
WATER SUPPLY														
Work collaboratively to acquire new water supplies for reliability														
Maximize and make efficient use of effluent and other locally renewable water supplies														
Foster increased use of reclaimed water														
Be prepared for climate change and drought														
DEMAND MANAGEMENT														
Increase the effectiveness of conservation programming through coordinated planning and evaluation														
Establish common water conservation goals and targeted methods														
Manage demand through design of the built environment														
Manage demand through changing behaviors														
Increase the use of rainwater and stormwater to reduce demands on potable supplies														

This page contains no comments

Brenda Garcia

From: Melaney Seacat
Sent: Thursday, November 18, 2010 3:55 PM
To: Brenda Garcia
Subject: FW: E-mail from TucsonPimaWaterStudy.com - Comments

Is this posted?

Melaney Seacat
Pima County Program Manager
City/County Water and Wastewater Study
(520) 740-6517

-----Original Message-----

From: Angie Gelsinon [mailto:angie@kaneenpr.com]
Sent: Friday, October 29, 2010 11:58 AM
To: Melaney Seacat; Nicole Ewing-Gavin
Subject: FW: E-mail from TucsonPimaWaterStudy.com - Comments

Additional comment caught in spam.

-----Original Message-----

From: noreply@tucsonpimawaterstudy.com
[mailto:noreply@tucsonpimawaterstudy.com]
Sent: Thursday, October 07, 2010 4:54 PM
To: info@tucsonpimawaterstudy.com
Subject: E-mail from TucsonPimaWaterStudy.com - Comments

Email Address: chilerico@gmail.com

Comments/Questions: Re: demand management

Although these steps are constructive, the concepts of managing demand through changing the built environment, and modifying behaviors with educational programs, appear severely limited in their potential to identify the scope of potential demand for water, or to permanently and significantly modify water use behavior.

Even the concept of using data to track trends appears to shy away from directly addressing water economics, which addresses consumer behavior.

Instead, this demand management focuses mainly on reducing demand through the design of the built environment -- a tangible means approach which does not concern itself with the full scope of water use decisions.

There should also be investment in data gathering and research that studies the behavior of water users. Careful estimation of household income, among other household factors and conditions, is very important in understanding water use behavior. Studies should attempt to correlate water demand with all factors faced by water users. Many studies of this type, including in Tucson, have demonstrated economic factors as most important for inducing and maintaining conservation of potable water.

Without data for this research, and commission of econometric studies, demand management is operating largely in the dark.

Economic concerns should not be limited to encouraging specific industrial development, as much as that is needed.

Do you wish to receive emails and posted mail information from

the Water Infrastructure, Supply and Planning Study?

Yes

Brenda Garcia

From: Mark Day [chilerico@gmail.com]
Sent: Thursday, October 07, 2010 4:59 PM
To: Brenda Garcia
Subject: Re: demand management

Re: demand management

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MONTGOMERY &
INTERPRETER, PLC

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October 7, 2010

Mayor Robert Walkup
City Council Members
City of Tucson
City Hall
255 W. Alameda Street
Tucson, Arizona 85701

Pima County Board of Supervisors
130 West Congress Street, 11th Floor
Tucson, Arizona 85701

Re: Pascua Yaqui Tribe's Comments to Water Study Action Plan

To: Nicole
Sjil/review
CR
10/12/10

Dear Mayor Walkup, Council Members, and Supervisors:

This Firm represents the Pascua Yaqui Tribe (Tribe) on water rights and water resource matters. The Tribe has been following with interest the joint efforts of the City of Tucson and Pima County to develop the Water and Wastewater Infrastructure, Supply and Planning Study (Water Study), and most recently, the related Water Study Action Plan, dated September 16, 2010 (Action Plan).

As with prior documents generated as part of the Water Study, the Action Plan appears to reflect a genuine attempt on the part of the County and the City of Tucson to encourage a regional discussion regarding comprehensive water resource and land use planning. The Tribe stands ready to contribute to and participate in the regional dialogue contemplated by the Water Study and Action Plan.

Indeed, the Tribe is presently working with the City of Tucson to complete negotiations for a water service agreement that would provide, among other things, settled expectations for both parties as to the extent and scope of Tucson Water's long-term water service commitment to the Pascua Yaqui Tribe, while also facilitating (for the first time) the delivery of the Tribe's annual 500 acre-feet allocation of Central Arizona Project water to the Tucson region.

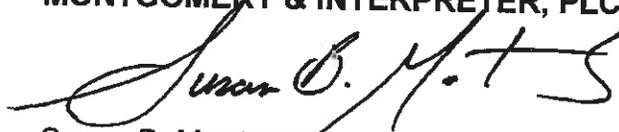
The Tribe is also generally supportive of the Action Plan elements which call for increased use of renewable water supplies, like effluent and reclaimed water, and which demonstrate a commitment by Pima County and Tucson to examining ways to expand a reclaimed water system in the region.

The Pascua Yaqui Tribe has lived in the Tucson region for as long as can be recalled, and it understands the critical importance of protecting and preserving the regional water supply for all who call the Tucson region home. The Tribe remains committed to working with Pima County and Tucson to achieve this important goal.

Should you have any specific questions related to these comments, please do not hesitate to contact me.

Yours Truly,

MONTGOMERY & INTERPRETER, PLC

A handwritten signature in black ink, appearing to read "Susan B. Montgomery". The signature is fluid and cursive, with the first name "Susan" being the most prominent.

Susan B. Montgomery

Cc: Chairman Yucupicio, Vice-Chairman Valencia, and Tribal Council Members
Pascua Yaqui Tribe
Rolando Flores, Pascua Yaqui Tribe Attorney General



Southern Arizona Home Builders Association

**Southern Arizona
Home Builders
Association**

2840 N. Country Club Road
Tucson, Arizona 85716
Phone: (520) 795-5114
Fax: (520) 326-8665
Web: www.sahba.org

President

Jessica D. Whyde

2010 Executive Officers

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Secretary/Treasurer

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Immediate Past Chairman

Michael Whyde
Pepper Viner Homes

Legal Counsel

John E. Kofron
Sherry J. Downer
Fennemore Craig

Affiliated With



SENT VIA ELECTRONIC MAIL

October 7, 2010

Ms. Nicole Ewing-Gavin & Ms. Melaney Seacat
City/County Water Study
Tucson, AZ

RE: Action Plan for Water Sustainability

Dear Ms. Ewing-Gavin and Ms. Seacat:

Thank you for the opportunity to comment on the City of Tucson/Pima County Action Plan for Water Sustainability. Attached you will find SAHBA's input on the Draft. As you will see, the primary focus of our comments is in regards to plan activities that increase the cost of development. Given the current economic circumstances and importance of the residential development industry in a recover, additional development costs would have adverse economic consequences. We look forward to your response and the opportunity to work collaboratively on this important matter.

Sincerely,

David Godlewski

Government Liaison, SAHBA

SAHBA Comments on Draft Action Plan for Water Sustainability

October 7, 2010

- Going from the first opportunity for public review (September 16) to the City Council for approval (October 26) in less than 6 weeks is rushed. In addition to a longer comment period, large stakeholder organizations like SAHBA deserve separate briefings/Q&A sessions.
- A truly regional plan or action plan for ensuring our community's sustainable water future requires direct participation of business representatives, private water providers and the other jurisdictions. The business community did not have a seat at the table crafting the Action Plan. It is our hope we play an integral role going forward on developing the activities and implementation.
- The content of the Draft Action Plan is, as previous Water Study documents, very professional. However, the formatting and layout is somewhat a "clunky." In many areas it's hard to read and difficult to follow. Why are the 'Introduction' and 'Action Plan Overview' separate sections separated by 3 pages? What's the difference between "Interconnected Elements," "Programs" and "Goals"? The various sections are not marked or noted as reflected by the Table of Contents. Additionally it's confusing that some of the pages of the different Action Plan Elements have graphics/pictures and some do not. It makes it hard to tell where a section starts and stops. There are some easy fixes that would improve the "readability" of the document.
- The primary concern SAHBA, and our members, have with the Action Plan is the associated increased costs of development with several proposed activities. New development in the Tucson region results in: local economic investment, jobs, sales tax, property taxes and corresponding school funding, permit fees and impact fees. Increasing the cost of development can only go up so much before the cost to develop is no longer economically viable. This is especially true in the price sensitive market conditions we face today. We ask that activities in the report that will, or could, increase costs be postponed. They should not be considered again until the carefully analyzed to ensure the benefits outweigh the costs and the residential and commercial markets return to normal levels. It would be counterproductive if the increased development costs associated with the Action Plan result in less economic investment, less job creation and less revenue from fees and taxes.
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 - P.5, Economic Collaboration - It's encouraging to see the reference of "Economic Collaboration" and a few Comprehensive Integrated Planning Activities (such as P.10, Program 2, #13) that recognize the importance of a healthy economy and aligning water policies with economic goals. We request a greater emphasis on economic collaboration

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- Comprehensive Integrated Planning
 - Pg. 10, Program 1: General and Comprehensive Plan Updates:
 - #2 – What are the associated costs of “Smart Growth”? If there are increased development costs, this should be taken off the table.
 - #6 – We are encouraged by the recognition to add employment and job centers in the updates to the Plans. However we would discourage an overly prescriptive approach that discourages job creation and economic development such as Tucson’s Water Service Area Policy and maps.

 - Pg. 10, Program 2, Smart Growth Tools and Incentives
 - #10 – We are encouraged by activities that promote mixed uses, well-designed density. SAHBA requests to be part of these discussions and activities.
 - #11 – Revisions to the County’s Cluster Ordinance should only be done if it does not increase development costs and fully vetted by stakeholders and approved by SAHBA. The Action Plan should be modified to reflect this.
 - #12 – The evaluation of improvement districts and potential purchase of natural/riparian areas must include cost/benefit analysis.
 - #13 – We support working with TREO to advance public/private collaboration toward economic base creation and ensuring water resource policies are aligned with economic goals. SAHBA requests to be part of this process.
 - #14 – We support a Land Use Code sustainability audit and request to be part of that process which include identifying opportunities to encourage sustainable form. Based on the professional input of our members, we feel fairly certain, the LUC itself is an impediment to sustainable growth.
 - #15 – New subdivision requirements would almost certainly add costs. This activity should be removed or tabled.
 - #16 - We are encouraged by an activity that would identify and address barriers to infill. SAHBA requests playing a role in this activity going forward.
 - #17 – It’s unclear as to what a “fiscal sustainability model” is. Requiring this for new development projects would likely add costs to development or be implemented to stop growth. We ask this item be removed.

 - P. 10, Program 3, Linking Water and Land Use Planning

- #19 – We support continuing wheeling agreements between Tucson Water and other water providers to provide water outside of the current water service area.
- Respect for the Environment
 - Pg. 12, Introduction – What are the costs and who pays when reservations are made for water for the environment?
 - Pg. 15, Program 1, Collaboration for Environmental Restoration
 - #1 – What are the replacement costs for water dedicated to the CEP? What are the opportunity costs associated with using water in this way? Will the public and/or stakeholders have an opportunity to comment on the CEP?
 - #2 – We ask there is a SAHBA representative on the Regional Restoration Working Group.
 - #3 – Will an inventory of land for riparian restoration be limited only to public lands? SAHBA can not support an inventory of private lands.
 - Pgs. 15, Program 2, Preservation and Protection of Riparian Areas
 - #8 – Adopting and implementing the Lee More Basin Management Plan was presented as an engineering and hydrologic based plan and was not represented as a riparian habitat protection measure. We ask for clarification on this matter.
 - #9 – The revised County riparian mitigation guidelines should only be adopted following thorough stakeholder vetting and a cost/benefit analysis is completed. The Action Plan should be modified to reflect this. If it is determined there are additional development costs associated with the new guidelines, this item should be tabled. Costs to taxpayers should be identified as well.
 - #10 – the sentiments of the comments for item #9 apply for this activity as well.
 - #12 - the sentiments of the comments for item #9 apply for this activity as well.
 - #13 - the sentiments of the comments for item #9 apply for this activity as well.
 - #18 - the sentiments of the comments for item #9 apply for this activity as well.
 - Pg. 16, Program 3, Incorporation of multiple benefit features into capital improvement projects
 - #19 – Costs, funding sources and impact to taxpayers should be identified.
 - #21 - Costs, funding sources and impact to taxpayers should be identified.
 - #22 - Costs, funding sources and impact to taxpayers should be identified.
 - Pg. 16, Program 4 – Refinement of Lower Santa Cruz River Management Plan
 - #23 - Costs, funding sources and impact to taxpayers should be identified.
 - #25 - Costs, funding sources and impact to taxpayers should be identified.
- Water Supply Activities
 - Pg. 21, Program 1, Water Supply and Water Quality

- #1 – We are encouraged by the recognition of the need to acquire new water supplies and recommend identifying costs and financing structures promptly.
- Pg. 21, Program 2, Effluent Management
 - #12 – SAHBA supports an assessment of graywater on sewer systems and would expect that the City’s residential graywater ordinance be repealed if it is document there is a negative impact on the sewer system.
 - #’s 18 and 19 – The feasibility studies associated with these activities should include a cost/benefit analysis, identification of costs, funding sources and impact to taxpayers.
- Pg. 22, Program 3, Regulatory/policy advocacy for effluent/reclaimed water, stormwater and graywater.
 - #22 – SAHBA cannot support any regulations that impose greater development costs related to graywater requirements for residential projects. Any references to graywater requirements should be removed from the Activity Plan.
- Demand Management
 - Pg. 26, Program 1, Planning and Evaluation
 - #2 - SAHBA supports an analysis of the City’s water harvesting ordinance as well as the overall potential for expanded water and stormwater harvesting. This analysis should consider and quantify costs and benefits. We would expect that the City’s rainwater harvesting ordinance be repealed if it is document there the costs exceed the benefits.
 - Pg. 26, Program 2, Consistent standards and guidelines
 - #7 – Neighborhood guidelines for stormwater harvesting would add significant costs to development. We ask this item be tabled or eliminated.



PO BOX 86117 • TUCSON, AZ 85754-6117

October 7, 2010

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Ms. Nicole Ewing-Gavin and Ms. Melaney Seacat
City/County Water Study
Tucson, AZ

Dear Ms. Ewing-Gavin and Ms. Seacat:

The Tucson Mountains Association provides the following comments on the draft Action Plan for Water Sustainability:

We congratulate the Action Plan Team Members for the comprehensive and coordinated approach to water sustainability. Key components of a successful plan are addressed, including: 1) integration of land use, infrastructure and water resources planning, 2) effluent, 3) gray water, 4) water harvesting, 5) environmental needs, 6) sensitive riparian ecosystems, and 7) may other important elements for a sound effort. The plan does not rely on additional resources to move forward, but recognizes the need for additional partnerships and outside funding when feasible. We commend the group on the thoughtful integration across the various segments of the plan. Suggested modifications are noted below:

❖ Comprehensive Integrated Planning (page 11): Regarding the indicators of future success, it might be better to have the first indicator read as follows: Percent change in residential unites/acre. There may be instances where increased density is not the best outcome.

❖ Effluent Management (pp. 19-21, and 23--indicator number 2): We are concerned that the previous earmark of effluent for the environment should be maintained into the future as our population expands. According to the Phase 1 Report, water resources currently available total 217,444 acre feet. Only 10,000 acre feet have been reserved for the Conservation Effluent Pool, or 4.6 percent. We believe this CEP allocation, which is being revisited again in this draft report, should be the minimum amount earmarked for the environment. It should not be redirected to aquifer augmentation. This is true especially with regard to the contaminants (e.g., pharmaceuticals) that may remain in the effluent in the long run if it were placed in retention pools used to augment the aquifer. If more effluent is produced due to growth in the four designated areas, the additional resource logically could go to irrigation or additional environmental needs as development occurs.

Again, thanks for the opportunity to review and comment on the draft action plan.

Sincerely,
Dr. Edwin A. Verburg
President



Tucson Regional Water Coalition

Prosperity - Sustainability - Community

October 8, 2010

Alliance of Construction
Trades

Arizona Builders Alliance

Arizona Multi-Housing
Association

Arizona Small Business
Association

Marana Chamber of
Commerce

Metropolitan Pima Alliance

Northern Pima County
Chamber of Commerce

Safe and Sensible Water
Committee

Smart United Business
Strategies

Southern Arizona Home
Builders Association

Southern Arizona
Leadership Council

Tucson Association of
Realtors

Tucson Hispanic
Chamber of Commerce

Tucson Metropolitan
Chamber of Commerce

Tucson Utility
Contractors Association

Melanie Seacat
City/County Water & Wastewater Study
115 N. Church Avenue
Tucson, Arizona 85701

Nicole Gavin-Ewing
City of Tucson
255 W. Alameda
Tucson, Arizona 85701

Dear City/County Water and Wastewater Study:

The Tucson Regional Water Coalition (TRWC) is a group of business and trade organizations collectively representing over 250,000 jobs in the Tucson region. The member organizations recognize the importance of water to our local and statewide economy, and have organized to engage policymakers on critical water management issues. In that regard, TRWC has reviewed the draft Action Plan for Water Sustainability. TRWC continues to evaluate all water policy against our Principles of Sustainable Water Resource Management, which we originally submitted as part of the Phase I Study (See Attached).

The TRWC is encouraged to find elements of the Principles in the draft Action Plan. We are equally encouraged to hear of City/County staff's willingness to continue working with TRWC to draft and implement policy that underscores the important role water management plays in regional economic prosperity. Based on conversations with City/County staff, TRWC has started drafting an additional section of the Action Plan that focuses specifically on water management objectives affecting job creation and long-term economic prosperity.

TRWC has always focused on what we define as the pillars of sound water management: 1) cooperative use of excess capacity in existing regional infrastructure; 2) addressing regional infrastructure deficits with regional funding mechanisms; 3) maximum use of existing water entitlements; 4) cooperatively work to acquire additional water entitlements for the region; 5) evaluate conservation measures as an alternative to supply acquisition; and 6) fully-integrate economic and financial analysis into water policy decision-making.

The TRWC believes that while the Action Plan contains elements of the above-mentioned concepts, it fails to appropriately group and identify these as fundamental to sound water management and regional economic prosperity. TRWC believes it is necessary to break these focus areas out into the proposed Economic Prosperity section of the Action Plan that we have agreed to help draft with City/County staff and perhaps TREO. We believe the current draft Action Plan is incomplete without the proposed section and that reorganization of certain concepts will ensure that the above listed pillars jointly supporting sound water management and economic development receive due attention.

City/County Water & Wastewater Study
October 8, 2010
Page 2 of 2

Finally, the Phase II Report and Action Plan provide a good, consolidated water policy platform to guide City and County staff on a number of water-related issues. However, TRWC believes these reports largely restate existing policy. Additionally, we believe that in an attempt to create an exhaustive list of water-related policy objectives, the Action Plan (and Phase II Report) lacks a clear focus on the fundamentals stated above. TRWC, and we believe the community at large, is hungry for new and creative ways to move the region forward. We are hopeful that the upcoming Regional Water Assessment will focus on ways to move the region beyond jurisdictional interests and develop a strong vision for how to manage water resources at the regional level.

Sincerely,

Tucson Regional Water Coalition

Principles of Sustainable Water Resource Management

Promote Comprehensive Inclusiveness and Transparency.

- Water management must be based on a participatory approach, involving a balance of technical expertise and expression of community values with an emphasis on consensus building between those representing current and future users, planners, and policy-makers at all levels within the region.

Acknowledge that Sound Water Resource Management Knows No Jurisdictional Boundaries.

- All water providers, users, and uses in the metropolitan area are connected by reliance on regional groundwater supplies to meet annual demand and provide a buffer against drought. Water planning should be conducted at the basin scale (defined as the Tucson AMA) and should involve all users.
- Support shared use of community infrastructure through cost-effective wheeling agreements for delivery of effluent, surface water, imported groundwater, and/or stored renewable supplies to achieve greater integration, reliability, flexibility and reliance on renewable supplies throughout the region.
- Collectively maximize purchase and underground storage of additional surface water and/or imported groundwater supplies, augmenting local groundwater supplies to further insulate the region from cyclical weather patterns.
- All local water supplies—groundwater, CAP, other surface water, and effluent—should be cooperatively used for the maximum economic, social, and environmental net benefit of the region expressed in monetized or quantifiable terms.
- All work products and policies of a local water planning process must be consistent with applicable state laws and policies. In circumstances where local conditions or values conflict with state law and/or policy, the process should seek the appropriate amendments at the state-level.

Recognize Water as an Economic Good with Value to all Competing Uses

- Price signals are an important tool for achieving efficient allocation of water resources. Current retail water rates do not match claims of scarcity and conflict with cultural messages urging conservation.
- Promote policies that facilitate allocation or reallocation of water resources to highest value uses that yield the greatest economic, social, and environmental net benefit for the region expressed in monetized or quantifiable terms.
- Commit to understanding the fundamental relationship between water resources and regional economic development in the form of job retention and creation, and the general prosperity of citizens.

Use Economic Analysis to Evaluate Alternatives & Risk

- Promote non-discriminatory methods, evaluating alternatives objectively and comparing net benefits in monetized or quantifiable terms.
- Promote community-wide conservation goals and standards that maximize acre-feet saved per community dollar spent, focusing policies and finite economic resources on uses/users with the greatest conservation potential.

- Evaluate proven conservation measures as an alternative to supply acquisition, justifying investment decisions on alternatives that yield the greatest economic, social, and environmental net benefit for the region expressed in monetized or quantifiable terms.
- Concerns regarding evolving and/or uncertain conditions should be addressed through iterative risk assessments and decision-making processes, systematically reevaluating risk according to potential financial impact to the region and probability of occurrence.

Create Long-Range Financial Plans and Funding Mechanisms

- A Sustainable Water Resource Management Plan for the region is incomplete without a Budget and Implementation Strategy (Fiscal and Physical). The region must move away from the “plan and pay as we go” approach and develop flexible long-range plans and funding mechanisms to avoid the potential for future crisis management situations.

Brenda Garcia

From: Angie Gelsinon [angie@kaneenpr.com]
Sent: Friday, October 29, 2010 11:53 AM
To: Melaney Seacat; Nicole Ewing-Gavin
Subject: FW: E-mail from TucsonPimaWaterStudy.com - Comments

Sorry this comment was caught in the spam filer - sorry for the late delivery.

-----Original Message-----

From: noreply@tucsonpimawaterstudy.com
[mailto:noreply@tucsonpimawaterstudy.com]
Sent: Thursday, October 07, 2010 12:15 PM
To: info@tucsonpimawaterstudy.com
Subject: E-mail from TucsonPimaWaterStudy.com - Comments

Email Address: eaverburg@yahoo.com

Comments/Questions: The Tucson Mountains Association provides the following comments on the draft action plan:

Overall Comment: We congratulate the Action Plan Team Members for the comprehensive and coordinated approach to water sustainability. Key components of a successful plan are addressed, including: 1) integration of land use, infrastructure and water resources planning, 2) effluent, 3) gray water, 4) water harvesting, 5) environmental needs, 6) sensitive riparian ecosystems, and 7) many other important elements for a successful effort. The plan does not rely on additional resources to move forward, but recognizes the need for additional partnerships and outside funding when feasible. We congratulate the group on the thoughtful integration across the various segments of the action plan. Suggested modifications are noted below:

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Dr. Edwin A. Verburg
President
743-7728

Do you wish to receive emails and posted mail information from the Water Infrastructure, Supply and Planning Study?

No



**Southern Arizona
Home Builders
Association**

2840 N. Country Club Road
Tucson, Arizona 85716
Phone: (520) 795-5114
Fax: (520) 326-8665
Web: www.sahba.org

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Pepper Viner Homes

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Sherry J. Downer
Fennemore Craig

Affiliated With



SENT VIA ELECTRONIC MAIL

November 3, 2010

Honorable Board of Supervisors
Pima County
130 W. Congress
Tucson, AZ 85701

RE: City/County Water Study Action Plan

Dear Chairman Valadez and Members of the Board:

SAHBA has been engaged in the City/County Water Study from its inception. Our primary focus has been, and remains, ensuring an appropriate framework for managing the region's water resources in a sustainable and financially sound manner to the benefit of current and future residents.

As it relates to the Action Plan, while there are a number of sound proposals we support, we urge you to deliver a strong message to local businesses that the Board of Supervisors is sensitive to current economic circumstances and will not advance action items that impose additional regulatory burdens or costs.

Local businesses, including development and construction companies, are the key to economic recovery. They are the job creators, sales tax generators and impact fee generators. Additional encumbrances would hamper turn-around.

To that end, we ask the following questions:

- 1) Will the action items be vetted by stakeholders and "signed-off" by the Board prior to implementation especially those related to new development and construction?
- 2) How will the Board evaluate or determine the costs/benefits associated with planned activities and will those that lead to additional costs for businesses be put on hold or eliminated?

On behalf of the 400+ SAHBA member companies, I look forward to your response and working with you on these important issues. Together we can move our community forward on issues of regional importance such as water.

I've attached a list of action items where our professional input would be valuable to the process and would like your support of our participation. Finally, I've also attached the specific comments SAHBA submitted during the public comment period. If you have any questions, I can be reached at 795-5114.

Sincerely,

David Godlewski
Government Liaison, SAHBA

cc: Mr. Chuck Huckelberry, Mr. John Bernal, Ms. Melaney Seacat

Attachment A

SAHBA asks to be part of the process for evaluating and implementing the following Action Items with the City/County Water Study Action Plan:

Comprehensive Integrated Planning Action Plan (pg. 11):

- Program 2 - Action Item #'s: 10-18

Respect for Environment Activities (pg. 17):

- Program 1 – Action Item #'s: 1, 2, 3
- Program 2 – Action Item #'s: 8, 9, 10, 12, 13, 17, 18

Water Supply Activities (pg. 23)

- Program 3 – Action Item #'s: 17, 22

Demand Management Action Plan (pg. 28)

- Program 1 – Action Item #'s: 2, 4
- Program 2 – Action Item #'s: 5, 6, 7



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Affiliated With



ATTACHMENT B

SENT VIA ELECTRONIC MAIL

October 7, 2010

Ms. Nicole Ewing-Gavin & Ms. Melaney Seacat
City/County Water Study
Tucson, AZ

RE: Action Plan for Water Sustainability

Dear Ms. Ewing-Gavin and Ms. Seacat:

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David Godlewski

Government Liaison, SAHBA

SAHBA Comments on Draft Action Plan for Water Sustainability

October 7, 2010

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 - Pg. 10, Program 1: General and Comprehensive Plan Updates:
 - #2 – What are the associated costs of “Smart Growth”? If there are increased development costs, this should be taken off the table.
 - #6 – We are encouraged by the recognition to add employment and job centers in the updates to the Plans. However we would discourage an overly prescriptive approach that discourages job creation and economic development such as Tucson’s Water Service Area Policy and maps.

 - Pg. 10, Program 2, Smart Growth Tools and Incentives
 - #10 – We are encouraged by activities that promote mixed uses, well-designed density. SAHBA requests to be part of these discussions and activities.
 - #11 – Revisions to the County’s Cluster Ordinance should only be done if it does not increase development costs and fully vetted by stakeholders and approved by SAHBA. The Action Plan should be modified to reflect this.
 - #12 – The evaluation of improvement districts and potential purchase of natural/riparian areas must include cost/benefit analysis.
 - #13 – We support working with TREO to advance public/private collaboration toward economic base creation and ensuring water resource policies are aligned with economic goals. SAHBA requests to be part of this process.
 - #14 – We support a Land Use Code sustainability audit and request to be part of that process which include identifying opportunities to encourage sustainable form. Based on the professional input of our members, we feel fairly certain, the LUC itself is an impediment to sustainable growth.
 - #15 – New subdivision requirements would almost certainly add costs. This activity should be removed or tabled.
 - #16 - We are encouraged by an activity that would identify and address barriers to infill. SAHBA requests playing a role in this activity going forward.
 - #17 – It’s unclear as to what a “fiscal sustainability model” is. Requiring this for new development projects would likely add costs to development or be implemented to stop growth. We ask this item be removed.

 - P. 10, Program 3, Linking Water and Land Use Planning

- #19 – We support continuing wheeling agreements between Tucson Water and other water providers to provide water outside of the current water service area.
- Respect for the Environment
 - Pg. 12, Introduction – What are the costs and who pays when reservations are made for water for the environment?
 - Pg. 15, Program 1, Collaboration for Environmental Restoration
 - #1 – What are the replacement costs for water dedicated to the CEP? What are the opportunity costs associated with using water in this way? Will the public and/or stakeholders have an opportunity to comment on the CEP?
 - #2 – We ask there is a SAHBA representative on the Regional Restoration Working Group.
 - #3 – Will an inventory of land for riparian restoration be limited only to public lands? SAHBA can not support an inventory of private lands.
 - Pgs. 15, Program 2, Preservation and Protection of Riparian Areas
 - #8 – Adopting and implementing the Lee More Basin Management Plan was presented as an engineering and hydrologic based plan and was not represented as a riparian habitat protection measure. We ask for clarification on this matter.
 - #9 – The revised County riparian mitigation guidelines should only be adopted following thorough stakeholder vetting and a cost/benefit analysis is completed. The Action Plan should be modified to reflect this. If it is determined there are additional development costs associated with the new guidelines, this item should be tabled. Costs to taxpayers should be identified as well.
 - #10 – the sentiments of the comments for item #9 apply for this activity as well.
 - #12 - the sentiments of the comments for item #9 apply for this activity as well.
 - #13 - the sentiments of the comments for item #9 apply for this activity as well.
 - #18 - the sentiments of the comments for item #9 apply for this activity as well.
 - Pg. 16, Program 3, Incorporation of multiple benefit features into capital improvement projects
 - #19 – Costs, funding sources and impact to taxpayers should be identified.
 - #21 - Costs, funding sources and impact to taxpayers should be identified.
 - #22 - Costs, funding sources and impact to taxpayers should be identified.
 - Pg. 16, Program 4 – Refinement of Lower Santa Cruz River Management Plan
 - #23 - Costs, funding sources and impact to taxpayers should be identified.
 - #25 - Costs, funding sources and impact to taxpayers should be identified.
- Water Supply Activities
 - Pg. 21, Program 1, Water Supply and Water Quality

- #1 – We are encouraged by the recognition of the need to acquire new water supplies and recommend identifying costs and financing structures promptly.
- Pg. 21, Program 2, Effluent Management
 - #12 – SAHBA supports an assessment of graywater on sewer systems and would expect that the City’s residential graywater ordinance be repealed if it is document there is a negative impact on the sewer system.
 - #’s 18 and 19 – The feasibility studies associated with these activities should include a cost/benefit analysis, identification of costs, funding sources and impact to taxpayers.
- Pg. 22, Program 3, Regulatory/policy advocacy for effluent/reclaimed water, stormwater and graywater.
 - #22 – SAHBA cannot support any regulations that impose greater development costs related to graywater requirements for residential projects. Any references to graywater requirements should be removed from the Activity Plan.
- Demand Management
 - Pg. 26, Program 1, Planning and Evaluation
 - #2 - SAHBA supports an analysis of the City’s water harvesting ordinance as well as the overall potential for expanded water and stormwater harvesting. This analysis should consider and quantify costs and benefits. We would expect that the City’s rainwater harvesting ordinance be repealed if it is document there the costs exceed the benefits.
 - Pg. 26, Program 2, Consistent standards and guidelines
 - #7 – Neighborhood guidelines for stormwater harvesting would add significant costs to development. We ask this item be tabled or eliminated.

I write in full support of the City/County Action Plan for Water Sustainability. I perceive the question about the future of Tucson's water supply as similar to another question: "Why hasn't NASA built a research station on the moon?" There are, of course, many reasons, but one of them is that it would be foolish to build if there is no way to provision the future residents with water. Building extensively is good for certain businesses, but it doesn't make good sense under all circumstances.

Residents of Tucson and Pima County are fortunate to have governments with foresight and an attitude to move forward with caution on water issues. This is reflected in formation of the TucsonPimaWaterStudyGroup, acceptance of their Phase I and II reports, and Tucson's rainwater harvesting ordinance. The data in the Phase I and II reports indicate that with increasing population, increasing demand for water, and climate change that is bound to reduce the available water supply, we are on track for a future water crisis that could hit within the lifetimes of many people who are reading this. The reports also show that some new alternatives for possibly importing water from far away could result in residents receiving a 10-fold increase in their water bills in a few decades. This would not be good for the local economy.

The time for cautious and imaginative planning is now. That is exactly what is in the Action Plan. This forward-looking action plan should be enacted so our water professionals can get to work on improving wise use of water resources. I urge you to resist the efforts of those people who would block this Action Plan and who recommend racing ahead with cheap housing developments that would make no more sense than building on the moon. And if small increases in building costs are necessary to do it

right, these are worth it. The costs of doing it wrong are far greater if Tucson collapses owing to having a water supply that is insufficient to sustain its future residents.

I might add that the companies that were involved in building our rainwater harvesting system at home in the Tucson Mountains found it good for their businesses to provide the labor, the gutters, the equipment rental, the digging, the underground 26,000 gallon concrete cistern, the pipes, pump, pressure tank, and water treatment equipment and filters plus maintenance for our development. This is not hypothetical, it's up and running. It's a form of smart building, and it's good for Tucson, including businesses.

Respectfully submitted, Charles J. Cole, 6381 W. Sweetwater Dr., Tucson, AZ 85745.

Brenda Garcia

Subject: E-mail from TucsonPimaWaterStudy.com - Comments

From: Angie Gelsinon [mailto:angie@kaneenpr.com]
Sent: Wednesday, February 02, 2011 11:22 AM
To: nicole.ewing-gavin@tucsonaz.gov; Melaney Seacat
Subject: FW: E-mail from TucsonPimaWaterStudy.com - Comments

Comments.

-----Original Message-----

From: noreply@tucsonpimawaterstudy.com
[mailto:noreply@tucsonpimawaterstudy.com]
Sent: Friday, January 21, 2011 5:01 PM
To: info@tucsonpimawaterstudy.com
Subject: E-mail from TucsonPimaWaterStudy.com - Comments

Email Address: oct55@msn.com

Comments/Questions: Perhaps I missed something in all this but I did not see any discussion of the impact of allowing Rosemont Mining to start mining in the Santa Rita Mountains.

Everything I have read indicates that Rosemont will require huge amounts of water in their operation.

Rosemont Mining (a Canadian Co.) will produce lots of copper which I understand will be sold to foreign companies, namely China. We will then buy it back in form of highly marked up finished goods.

In addition, Silver Wheaton Corp. (a Canadian Co.) will buy all the Silver and Gold produced by Rosemont at prices that are less than half of the long term price set for precious metals. That price is 3.90/oz - Silver 450.00/oz - Gold. (Star Business page, February 22). They will then sell it on the open market in London to the highest bidders.

Arizona will get a few mining jobs. Loss of a huge amount of our precious water. Some enormous holes in the ground. Mountainous ugly tailings piles. Destruction of beautiful scenery along State 83, as well as wildlife habitat and outdoor recreation used by many Arizonans and Visitors to our state.

I guess I missed something, It doesn't seem like a fair trade to me!

Do you wish to receive emails and posted mail information from the Water Infrastructure, Supply and Planning Study?

Yes