



# MAYOR & COUNCIL MEMORANDUM

April 13, 2010

Subject: **Discussion of Refinements to Water Service Area  
(City-Wide and Outside City)**

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**Issue** – At the Mayor and Council meeting of February 17, 2010, the Council directed staff to return within 45 days with a discussion of formalizing and refining Tucson Water’s service area as recommended in the City/County Water and Wastewater Phase II Report. Time has been set aside at today’s Study Session to discuss refinements to the Tucson Water service area.

**City Manager’s Office Recommendation** – It is recommended that the Mayor and Council provide feedback to staff on the Tucson Water service area as depicted in the attached “Proposed Tucson Water Service Area” map. As a next step, staff recommends a 30-day comment period on the proposed water service area to allow time for additional public input. Once a water service area map is agreed upon by the Mayor and Council, a resolution will be brought forward to formalize the Tucson Water service area.

**Background** – Prior to 2007, the City did not have a water service area policy in place and Tucson Water extended water service based on customer requests throughout the region. There were many downsides to this approach including:

- growth in unincorporated areas which means fewer revenues to fund public services for the community,
- a disconnect between water planning and land use/infrastructure planning,
- water boundaries not matching jurisdictional boundaries leading to governance issues,
- challenges of planning effectively for future water needs in such an extensive boundary, and
- impacts on existing water customers from growth, whether in upward pressure on water rates or increased competition for additional water supplies.

In December 2007, recognizing this water service approach may not be sustainable, an interim policy was established retracting the Tucson Water service area to that which was legally obligated. Legal opinions from Marvin Cohen and Chris Avery serve to define the Tucson Water Obligated Service Area, which includes: 1) the Tucson city limits, plus 2) areas where the City is contractually obligated to serve such as Continental Ranch, Dove Mountain and Corona de Tucson, plus 3) infill within the existing water service area. The Obligated Area is depicted in blue on the attached “Proposed Tucson Water Service Area” map.

The City Manager directed staff to work with stakeholders and ensure the interim policy was being implemented clearly, consistently, and as efficiently as possible. Tucson Water developed a water service decision flow chart and infill guidance graphics to make the decision process transparent and predictable. A formal appeals board was established to review cases where customers disagree with a water service decision. Staff has reached out to stakeholders in the development community to make sure they understand how the interim policy is being

implemented and to solicit comments that can help streamline and improve the review and appeal processes.

Since 2007 when the interim Obligated Service Area policy was put in place, Tucson Water has denied requests for water service approximately 100 times, and the City has entered into several pre-annexation and development agreements (PADAs) with property owners who were located outside of the obligated area but who agreed to future annexation to allow for water service extension.

The Obligated Service Area policy was established as an *interim* policy at the same time that the City/County Water and Wastewater Study was initiated. One of the goals in the Study was to help inform future water service area expansion decisions. Phase II of the Study is now complete and was adopted by the Mayor and Council in February 2010. The Phase II Report recommends that the City maintain a water service area boundary but consider expansions to the current obligated area based on a set of economic and environmental factors described below.

**Water Service Area Expansion: Considerations** – The City/County Water and Wastewater Study recommends water service area expansion decisions be done on a sub-regional basis (vs. a parcel-by-parcel basis) in advance of specific water service requests, and take into account the following factors:

- *Suitability of Growth Area* – Suitable growth areas are those areas closer to infrastructure and the existing built environment, and where development creates the fewest negative environmental impacts.
- *Appropriateness of Timing/Phasing of Development* – “Leapfrog” development and development further away from the existing built environment is more costly to serve from an infrastructure and public service perspective compared with infill development and development taking place closer to the existing built environment.
- *Impacts on Water Resources* – Extending water service creates additional demand for water resources and has an impact on Tucson Water’s water portfolio and the need to acquire or develop additional water supplies.
- *Fiscal Sustainability of Development and Potential for Future Annexation* – When development occurs adjacent to but outside City limits, the region doesn’t receive the full range of revenues needed to pay for the public services the new development will require. Forgone revenues from development in unincorporated areas include sales tax, construction sales tax, additional state shared revenue and additional property tax.
- *Economic Impact/Benefits* – The I-10 Corridor through southern Tucson is a focus for economic development efforts and is identified as a future jobs center. Ensuring the availability of water resources to support industry, good jobs, and a diversified economy is critical to the future economic health of our community.
- *Quality and Sustainability of Urban Form* – New development that is designed from a “smart growth” perspective provides many benefits to the community including such things as reduced car passenger miles, lower water and energy consumption per household, more housing and transportation choices, and more efficient/lower cost delivery of public services. Our water policy can help support smart growth goals.

- *Environmental Implications of Development* – Water service should be directed to areas where development will have fewer negative environmental impacts.
- *Environmental Implications of Not Providing Water Service* – A potential result of Tucson Water limiting its water service area is the drilling of wells and less use of renewable water supplies in the area outside of this boundary.
- *Social equity and social justice considerations* – The impact of water service extension decisions to City residents and Tucson Water ratepayers, particularly those with lower incomes should be considered.

**Water Service Area Expansion: Staff Recommendations** – A staff team from the City Manager’s Office, Tucson Water, Housing and Community Development, Annexation, and Conservation and Sustainable Development has been meeting over the past 2 months to develop water service area expansion recommendations based on the above factors.

In summary, the areas recommended for *water service expansion* include those areas where:

- The City of Tucson has the potential to annex in the future
- Jobs, employment, industry, and future growth will be located
- Tucson Water is clearly the water provider and there are not other service options, and
- Failure to provide service could lead to drilling of wells in environmentally sensitive areas

The areas *not recommended for water service expansion* include areas where:

- The City of Tucson is unlikely to ever annex
- They are closer to or within another jurisdiction and/or there are other water service providers in the area

The attached “Proposed Tucson Water Service Area” map depicts staff’s recommendations for water service expansion by sub-region surrounding the Tucson Water Obligated Service Area. The areas currently served by Tucson Water (dark blue) and those undeveloped areas the utility is required by contract or law to serve (light blue, blue hatch) are collectively referred to as the existing Obligated Service Area, which covers a total of about 410 square miles and includes approximately 770,000 customers.

As further described below, recommendations for water service extension *outside* of the Obligated Service Area are shown in four colors on the map: (1- pink) water service with required annexation (or pre-annexation) to the City, (2- pink stripe) water service with annexation reviewed on a case by case basis per the merits of such annexation, (3 - yellow) areas where water service would not be extended in unincorporated Pima County, and (4- grey) areas belonging to other municipalities, private water companies, and tribal lands.

***1. Proposed Service Area – Annexation Required (map color - pink)***

In these areas, water service would be provided by Tucson Water and annexation or a pre-annexation development agreement (PADA) would be *required*. In general, property adjacent to and near City limits is colored pink because it is a likely candidate for annexation

and falls within the existing built environment, which is a high priority for growth. The Southlands also has a significant amount of “pink” because it is an identified growth area in the City’s General Plan and in the City/County Water and Wastewater Study. This area is suitable for growth due to fewer environmental constraints and because it is closer to existing infrastructure and the built environment. The I-10 corridor is a prime location for commercial and industrial development and will continue to grow as a job centers. This area is a desirable and likely candidate for future annexation because it is surrounded by City limits and includes vacant land.

**2. *Proposed Service Area – Annexation Requirement to be Reviewed (map color - pink stripe)***

In these areas, water service would be provided by Tucson Water and the requirement of annexation or a PADA would be *reviewed by City staff on a case-by-case basis*. Those properties that would be *more* likely to be required to annex or sign a PADA would be adjacent to or near City limits, and would be commercial or residential subdivision. Those properties that would be *less* likely to be required to annex or sign a PADA are those that are far from City limits with built-out residential areas in between, and are being built at existing low density zoning.

In these areas, Tucson Water has infrastructure in place and is the clear water service provider – few or no other water service options exist for property owners. In areas closer to washes and riparian habitat (such as the Tanque Verde valley), there would be negative environmental impacts if property owners in these areas drill wells (which is allowed by state law) rather than utilizing renewable supplies through Tucson Water. Build-out in these area is limited and will be at low densities, or clustered, so serving new customers in these areas will have a minimal impact on Tucson Water’s water supplies. Development in these areas will be required to comply with the County development regulations, helping to ensure that the development Tucson Water is serving occurs in an environmentally compatible manner.

**3. *Proposed No Water Service (map color – yellow)***

In these areas, water service would not be provided by Tucson Water at this time, subject to reconsideration by the Mayor and Council in the future if circumstances change. In the areas where no water service extension is recommended, but Tucson Water has existing water service in place (such as in the northwest and the southwest), Tucson Water would be willing to partner with other water providers in those areas with consideration given to “wheeling” agreements and future infrastructure sale and transfers.

The areas identified for no service are located in unincorporated Pima County. Some of these areas such as in the southwest are planned to be growth areas with significant density. A downside to this type of growth in unincorporated areas is less revenues generated to pay for public services. As a result these areas end up being subsidized by the rest of the community and/or are developed with sub-standard infrastructure and public services in place. The areas identified in yellow are not ever likely to be within the City of Tucson because of their distance from City limits and the existence of built-out areas in between. In

many cases, these areas are closer to another jurisdiction or private water provider who could provide water service.

**4. Other Municipalities, Private Water Companies, and Tribal Lands (map color – grey)**

Tucson Water currently provides water in Marana and in limited areas in Oro Valley. Typically, these services were established prior to annexation into the towns. It is proposed that any new extensions of water service within other jurisdictions by Tucson Water be neutral to the City of Tucson's Assured Water Supply. Other municipalities should be responsible for water supply and water service within their jurisdiction. In cases where Tucson Water already has built out water infrastructure and is providing service in other jurisdictions, Tucson Water is willing to enter into agreements with those jurisdictions to facilitate water service using Tucson Water delivery infrastructure and other jurisdictions' resources. Ultimately, transferring assets through the sale of water infrastructure to better line up water service and jurisdictional boundaries would benefit the region.

**Impacts of the Proposed Policy** – The Water Policy Decision Making Framework that was adopted by the Council along with the City/County Water and Wastewater Study on February 17, 2010 is used below to evaluate the impacts of the proposed Tucson Water Service Area policy. It is important to note that staff has done their best to analyze the impacts of these proposed water service extensions, however given the 45 day turnaround and resources available, these assessments are more qualitative than quantitative and are based on currently available data.

- **Financial Costs** – Limiting the Tucson Water service area geographically, and focusing water resources on the highest priority growth areas for the City of Tucson will maintain lower rates for Tucson Water's ratepayers over time because less new (expensive) water will need to be acquired and infrastructure extensions will be more limited. A clear service area provides more certainty for developers, which saves time and money in the development process. Encouraging growth in incorporated areas benefits City taxpayers and the community as a whole financially because more revenues are available in the region to pay for public services. On the flip side, this policy may increase the cost for water to those outside the Tucson Water service area and could decrease land values in those areas.
- **Economic Impacts** – This policy dedicates affordable, renewable, high quality water resources to the I-10 corridor in the south and southeast (dubbed the "Tucson Tech Corridor") which is planned to be the major economic and job center in our region in the future. It encourages annexation which brings more revenue to the community to invest in roads and other public infrastructure and services. This is identified in the TREO Blueprint as an essential aspect of improving Tucson's image and business climate.
- **Environmental Impacts** – This policy brings renewable supplies to environmentally sensitive areas where Tucson Water is the only available water provider and private wells might otherwise be sunk, such as in the northeast. This policy encourages growth in a more

compact form away from environmentally sensitive areas as defined in the County's Sonoran Desert Conservation Plan (see Map #2 attached).

- Impact on Tucson Water's Resources – The impacts this policy would have on water resources were estimated by Tucson Water staff based on the planning parameters and data modeled for the 2008 update to the Tucson Water 2050 Plan. Based on assumptions of lower water usage patterns over the past decade, conservative planning factors, new water conservation ordinances, and estimated build out density of the area in “pink” on the map, the current capacity in Tucson Water's water resource portfolio would be adequate to serve the areas of proposed service extension. It is important to note that this is not an exact science, and issues such as how and when future growth areas will build out, how much water will be required in the future in the obligated area related to infill, and how water conservation and usage trends will change over time are unknown today and will have an impact on water supplies in the future.
- Effect on Drought/Climate Change Preparedness – Limiting Tucson Water's service area helps protect supplies which allows for water storage underground for use during times of future drought. It also provides flexibility for Tucson to be able to increase water use in the future to mitigate climate change impacts, for example by allocating water for more trees to provide shade.
- Impact on Public Infrastructure, Services, and Fiscal Sustainability – This policy encourages growth closer to the existing built environment and to existing infrastructure which is more fiscally sustainable for the community and efficient in terms of land use and the provision of public services.
- Impact on Location of Growth, Urban Form, and Land Use – This policy helps encourage growth in those areas identified as most suitable for development including infill into the existing built environment, the southeast area, and the southlands.
- Energy Costs – Limiting Tucson Water's service area geographically means there will not be significant increases in energy needed to move water long distances. Area higher up in the Tucson Mountains that would require significant energy to lift water are recommended for no service.
- Opportunity Costs – None identified.
- Social Equity Considerations/Community's Ability to Pay – Limiting the Tucson Water service area geographically will help maintain lower rates for Tucson Water's ratepayers over time.

**Input from Stakeholders** – Staff met with the Citizen's Water Advisory Committee, members of the Tucson Regional Water Coalition (a business group), an environmental coalition convened

by Ward 2, and staff from Pima County to share the recommended service area expansion map and solicit feedback. Below is a summary of comments received from these groups:

- *Citizen Water Advisory Committee* – Comments by CWAC members included the need to make sure the PADA process is streamlined and that issues that may hold up annexation or a PADA (such as agreement with the County on use of impact fees) be addressed ahead of specific developments coming forward. Support was expressed for the concept of wheeling agreements in areas where Tucson Water will not be providing service and for annexation and/or incorporation of urban development in the Tucson area. CWAC members asked about the impact water service extensions would have on water resources; staff responded that we would be gathering more precise data over the next 30 days.
- *Tucson Regional Water Coalition* – Members expressed support for the recommended expansions to the Tucson Water service area particularly the dedication of water to the areas along I-10 targeted for economic growth in the region and the fact that a water service area boundary provides greater certainty for property owners. A member expressed concern about the annexation requirement and indicated that there may be cases where it is not in the interest of a particular development to be located within the City limits.
- *Environmental Coalition* – A general sentiment expressed by this group was that more data is needed before decisions on water service extension are made, particularly related to how water resources will be affected by service extensions. Members of this group expressed support for service extensions that help protect riparian areas, such as in the northeast. Members were concerned that environmentally sensitive lands in the Tucson Mountains were recommended for water service.
- *Pima County Staff* – County staff expressed support for the fact that renewable supplies will be provided to development in riparian areas in the northeast, that this service area encourages growth closer to existing infrastructure and a more compressed urban form, and that the proposed water service area is generally consistent with where the County's Conservation Land System directs growth. Concerns expressed by County staff include the fact that water service will not be provided in the Southwest area (particularly east of the CAP canal) which is a County growth area, and that some environmentally sensitive lands in the Tucson Mountains are recommended for water service. County staff expressed interest in moving forward with comprehensive water resource planning in those areas that fall outside the Tucson Water service area as recommended in the City/County Water and Wastewater Study.

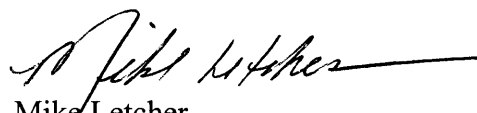
Overall, the following recommendations generally seemed to receive support from all groups:

- Water service extension to the foothills and the northeast (Tanque Verde valley area)
- Water service extension to areas in the southlands along I-10 where land is planned for commercial and industrial

**Next Steps** –

1. Staff recommends that a 30-day comment period be provided to allow stakeholders time to review and comment on the map and recommendations.
2. During this 30-day period, staff, where feasible, will pull together additional quantitative data related to the impacts of the recommended water service area extensions.
3. Staff will be prepared to bring this item back for Mayor and Council consideration in late May or early June. Once Council endorses a defined water service area map, staff will prepare a resolution for adoption that formalizes the Tucson Water Service Area policy.
4. Upon adoption of the Tucson Water Service Area policy, an appropriate next step for the jurisdictions and water providers in areas that fall *outside* of the service area would be to come together to address water planning in these sub-regions. Tucson Water is committed to being a partner in this planning effort and is willing to work with other entities where Tucson Water has infrastructure capacity that can be used to “wheel” renewable water resources to these areas. The City/County Water and Wastewater Study includes a recommendation describing this water planning effort.
5. Another next step staff recommends following the adoption of a Water Service Area policy is that discussions with the County begin on how the City and County can work together in a collaborative fashion in areas where the City is proposing to pursue annexation. In the past, the City and County have had disagreements over specific annexations including such issues as which jurisdiction will review development plans, how public services and infrastructure should be provided, and how impact fees will be used. Staff recommends these issues should ideally be discussed and addressed in an agreement between the City and County ahead of specific annexations and development pressure. This is consistent with the recommendations for sustainable growth as set forth in the City/County Water and Wastewater Study.

Respectfully submitted,



Mike Letcher  
City Manager

ML:NEG

**Attachments:**

- Map #1 – Proposed Tucson Water Service Area
- Map #2 – Conservation Land System with Obligated Water Service Area Overlay

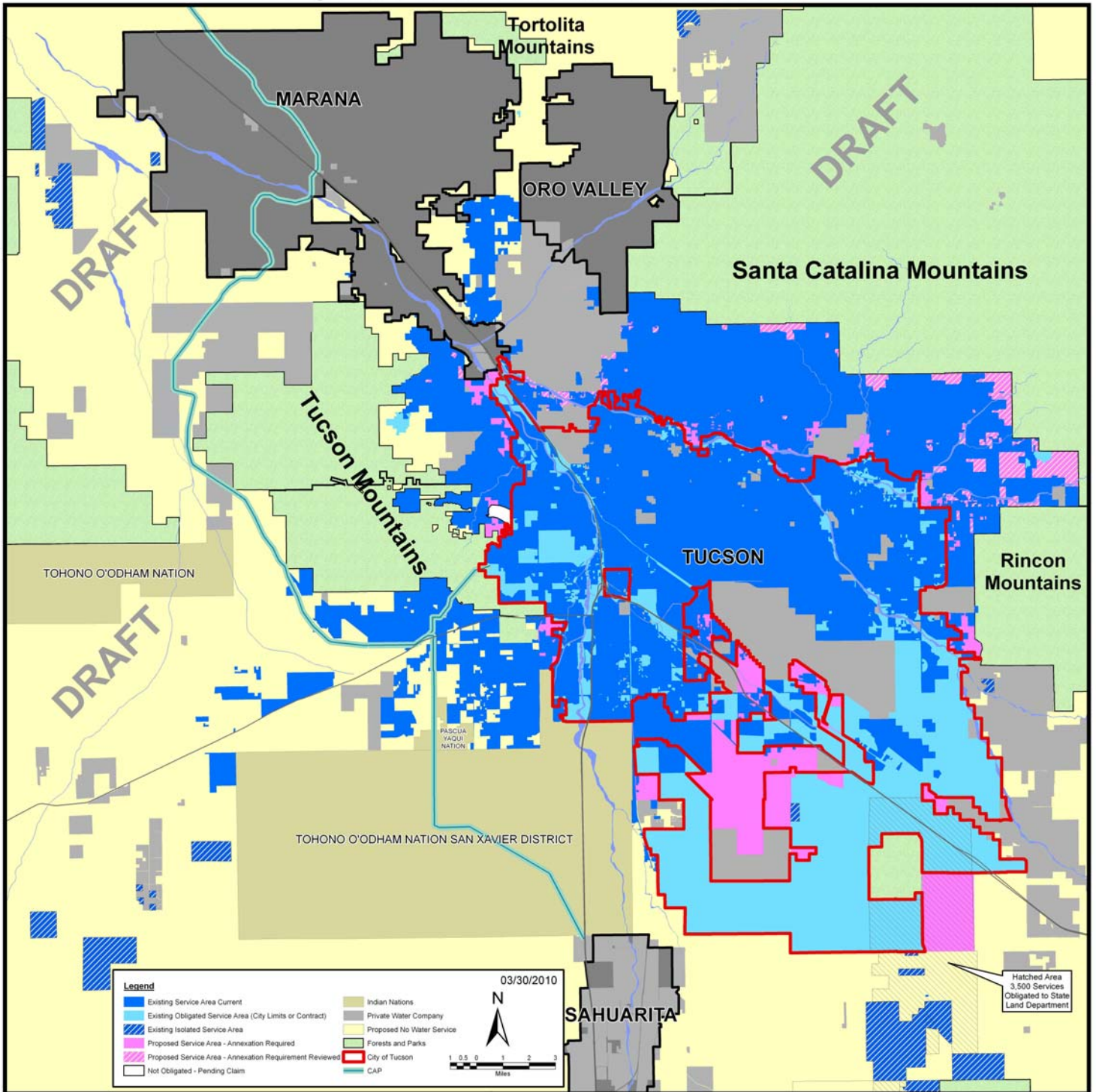
- No water service extension in the northwest where Marana, Oro Valley or Metro Water are the more appropriate water provider
- No water service extension west of the CAP canal in the southwest area

Water Service Area Policy: Implementation – Upon adoption of a resolution formalizing the Tucson Water Service Area, Tucson Water staff would make determinations of water service based on the language in the resolution and the conceptual map. The map that gets adopted will not be color-coded to the parcel level; therefore Tucson Water staff would use the map and supporting text to make the appropriate determination of water service.

- For water service requests in areas colored pink on the map, Tucson Water would respond with a letter outlining the steps to be taken to gain water assurance and would refer these customers to annexation staff to process an annexation or PADA.
- For water service requests in the pink stripe, annexation staff would review the requirement for annexation, and then advise Tucson Water regarding whether a PADA would be a requirement of water service.
- In areas where blue abuts yellow on the map, Tucson Water staff would continue to use the infill decision graphics (e.g. 3 sides, 20 acre threshold) that are in place now to determine areas of legal obligation.
- The existing appeals board (consisting of a representative of the City Manager's Office, the City Attorney, and the Director of Housing and Community Development) would continue to function to hear appeals from property owners who feel Tucson Water made an incorrect determination.
- Finally, staff will ensure that the Mayor and Council receives timely information about proposed projects that might provide a large-scale economic opportunity for the region but that lie *outside* of the Water Service Area, so that the Council could authorize exceptions to the adopted Water Service Area policy and provide water service if they so choose.

It is recommended that the Water Service Area be reviewed each year by the Mayor and Council at the same time the City's water checkbook is brought forward. The water checkbook is a mechanism by which Tucson Water reports annually to the Governing Body the quantity of renewable water supplies; currently utilized by existing customers, reserved for development plans in progress and available for future development. The water utilized by current customers is determined by the total water deliveries to customers in the prior calendar year. The reserved renewable water supplies for development is found by taking the acreage of all developments which have been issued a water assurance letter in the prior year and applying planning factors for likely consumption based on parcel zoning. Each year in June, an updated balance of the water checkbook is provided to gauge the total remaining renewable water supplies in the checkbook available for future development. Available water resources would be one factor, among others – including growth patterns, economic trends, water usage trends, environmental concerns, stakeholder input, etc. – that the Mayor and Council might take into consideration in modifying the Water Service Area.

# Proposed Tucson Water Service Area



# Conservation Land System with CoT Obligated Water Service Area Overlay

