



2011 GENERAL PLAN COMMITTEE

Community Development Department

Agenda

**2011 General Plan Committee
Regular Meeting
Wednesday, November 9, 2011
4:00 PM to 6:00 PM**

**Downstairs Conference Room, City Hall
201 S. Cortez Street
Prescott, Arizona
928-777-1207**

The following agenda will be considered by the PRESCOTT GENERAL PLAN COMMITTEE at its REGULAR MEETING on WEDNESDAY, NOVEMBER 9, 2011, in the DOWNSTAIRS CONFERENCE ROOM, CITY HALL, 201 S. CORTEZ STREET, PRESCOTT, ARIZONA. Notice of this meeting is given pursuant to *Arizona Revised Statutes, Section 38-431.02.*

I. Call to Order

II. Attendance

MEMBERS

Miriam Haubrich, Co-Chair	Elisabeth Ruffner
Terry Marshall, Co-Chair	George Sheats
Brad Devries	Gary Worob
Dave Fisher	
Glenn Gooding	<i>EX OFFICIO</i>
Zena Mitchell	Steve Blair, Councilman
Roxane Nielsen	John Hanna, Councilman
David Quinn	

III. Announcements

IV. Regular Items

1. Consider approval of the minutes of the October 26, 2011 meeting.
2. Discussion regarding the scheduled December 28, 2011 meeting.
3. Discussion of Water Resource element text.
4. Call to the Public.

V. Adjournment

THE CITY OF PRESCOTT ENDEAVORS TO MAKE ALL PUBLIC MEETINGS ACCESSIBLE TO PERSONS WITH DISABILITIES. WITH 48 HOURS ADVANCE NOTICE, SPECIAL ASSISTANCE CAN BE PROVIDED FOR SIGHT AND/OR HEARING IMPAIRED PERSONS AT PUBLIC MEETINGS. PLEASE CALL 777-1272 OR 777-1100 (TDD) TO REQUEST AN ACCOMMODATION TO PARTICIPATE IN THIS MEETING.

CERTIFICATION OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Prescott City Hall and on the City's website on November 4, 2011 at 4:00 PM in accordance with the statement filed with the City Clerk's Office.

Kathy Dudek, Administrative Assistant
Community Development Department

**2011 GENERAL PLAN COMMITTEE
REGULAR MEETING
OCTOBER 26, 2011
PRESCOTT, ARIZONA**

MINUTES OF THE REGULAR MEETING OF THE 2011 GENERAL PLAN COMMITTEE HELD ON OCTOBER 26, 2011 AT 4:00 PM IN THE DOWNSTAIRS CONFERENCE ROOM, CITY HALL, 201 S. CORTEZ STREET, PRESCOTT ARIZONA. *Notice of this meeting was given pursuant to Arizona Revised Statutes, Section 38-431.02.*

I. Call to Order

Co-chairman Haubrich called the meeting to order at 4:00 PM.

II. Attendance

MEMBERS PRESENT	EX OFFICIO MEMBERS
Miriam Haubrich, Co-Chair	John Hanna, Councilman
Brad Devries	Steve Blair, Councilman
Glenn Gooding	
Zena Mitchell	COUNCIL PRESENT
Gary Worob	Jim Lamerson, Councilman
George Sheats	
David Quinn	STAFF MEMBERS PRESENT
Elisabeth Ruffner	Tom Gulce, Community Development Director
	George Worley, Planning Manager
MEMBERS ABSENT	Ryan Smith, Community Planner & Committee Liaison
Terry Marshall, Co-Chair	Leslie Graser, Water Resources Specialist
Dave Fisher	
Roxane Nielsen	

III. Announcements

None.

IV. Regular Items

1. Consider approval of the minutes of the October 12, 2011 meeting.

Mr. Sheats, **MOTION:** to approve the minutes of the October 12, 2011 meeting.
Mr. Devries, 2nd. **Vote: 9-0.** (unanimous).

2. Discussion and edits to the Water Resource element.

Mr. Smith noted that Water Element (WE), Goal 2 was discussed at the previous meeting and that WE Goal 3, "Developing Additional Water Supplies" for the city will be the starting point of today's meeting.

Discussion ensued and suggestions were made regarding Water Element Goals 3, 4 and 5 along with the associated strategies. The committee discussed the public comments following Goal 3, and Mr. Smith was directed, by consensus, to make appropriate changes.

The Water Element discussion and resultant draft language provided by Mr. Smith is attached as Exhibit "A" to the minutes.

Mr. Smith and Ms. Graser proffered that this discussion and any proposed change is not the "final pass"; consequently, at a later time, the goals, strategies and conditions will be carefully examined to "marry up" all parts.

Mr. Quinn, **MOTION:** to add the following goal to the Water Element section of the General Plan "Communicate to state-level officials and representatives the need for improved, appropriate water law and regulations." Mr. Sheats, 2nd. **Vote: 8-0.** (Mr. Gooding had a prior commitment and was not present for the vote).

Ms. Ruffner would like to see the committee go into the voluntary elements and include the conservation element, watershed element, etc. Mr. Worob noted that, through Prescott Creeks, a booklet will be produced within two weeks which will document this information. The grant will be determined by the end of November. Mr. Worob noted that he will submit everything to Mr. Smith.

Mr. Smith reviewed Goal 5. Mr. Worob requested that the entire goal be postponed until the aforementioned booklet is published.

Mr. Quinn provided language to Mr. Smith for Goal 5, Strategy 5.1 and Goal 1, Strategy 1.8 Ms. Graser asked that the word "quality" be added to Strategy 1.8. (Refer to Exhibit "A", attached).

3. Call to the Public:

(Public comments occurred at the conclusion of each goal discussed).

Goal 3:

Mr. Daniel Matson, 148 E. Merritt Street: redundancy of strategies 3.3 and 3.4; elimination of strategy 3.5; public comment procedure.

Mr. Howard Mechanic, (no address listed on sign-in sheet): strategies 3.3 and 3.4 are redundant; the inability to implement a new water impact fee; a need for the city to investigate water alternatives; water costs should not be subsidized or discounted; strategy 3.1 needs ". . . by the AMA."

Ms. Barbara Jacobsen, P. O. Box 3914 (86302): clarification of the term "local water reserves," Big Chino Water Ranch.

Goal 4:

Mr. Mechanic: Strategy 2.2, water rates should be based on “market price” not the cost; clarification of the 4,600 AF of water and where the water will go, whether for development or safe yield.

Goal 5:

Mr. Mechanic: the term “communicating with state” is nebulous; a law is needed about protecting rivers; there are no federal standards with pharmaceuticals; the city can set higher standards.

Mr. Mattson: addressing pharmaceuticals and the quality of water is necessary; Prescott can become “leaders” in terms of addressing state laws.

V. Adjournment

Co-chairman Haubrich adjourned the meeting at 5:58 p.m.

Miriam Haubrich, Co-Chairman

Terry Marshall, Co-Chairman

Ryan Smith, Community Planner

Kathy Dudek, Administrative Assistant
(transcription in absentia)

EXHIBIT "A"



2011 General Plan Committee Community Development

Update of Water Goals and Strategies from meeting Wednesday, October 26, 2011
Deleted items are in strikeout and added items are in grey highlight.

10.4 WATER RESOURCES GOALS AND STRATEGIES

Add NEW Goal: Communicate to State level officials and representatives the need for improved and appropriate water law and regulations.

Goal 1. Provide a reliable water supply **in quantity and quality** for the city. ~~by employing water conservation measures.~~

Strategy 1.7 Continue to encourage conservation and individual rainwater harvesting (micro-harvesting) to reduce potable water use for outdoor watering through native plant choices and the addition of rain water catchments on businesses and residences.

Strategy 1.8 Conduct a study to identify pharmaceutical pollution in supply wells and recharged effluent.

Goal 3. Develop Additional Water Supplies for the city.

Strategy 3.1 Pursue ~~the importation of~~ **all** water resources in sufficient quantities to reduce depletion of local water reserves and **achieve contribute to the achievement of "safe yield" by the AMA.**

Strategy 3.2 ~~Utilize imported water in a manner recognizing it as a benefit of limited reliability due to potential drought impacts and legal claims by other jurisdictions.~~

Strategy 3.3 3.2 Develop funding strategies and **investigate additional water impact fees** to finance new water sources and technologies.

Strategy 3.4 ~~Investigate creating a water impact fee for new homes and/or commercial buildings to finance new water sources and technology. (Combine with 3.3)~~

Strategy 3.5 — Investigate creating a differential water [redacted] buy-in fee for new multifamily homes set at a lower rate than for Single-family homes as an incentive for [redacted] lower-cost housing.

[redacted]

[redacted]

Goal 4. Include the citizens in decision making on water policies.

Strategy 4.1 — Provide continuing public information regarding water policy questions.

Strategy 4.2 — Promote [redacted] public involvement in major capital improvement decisions for water acquisition projects.

Goal 5. Continue to participate in regional coordination Programs regarding water resources.

[redacted]

Strategy 5.1 [redacted] Continue to take an active role in regional water forums.

Strategy 5.2 [redacted] Partner with other jurisdictions and fund studies to identify conservation measures and additional water resources.

Discussion:

The December 28, 2011 meeting – have the meeting, or cancel the scheduled meeting?



2011 General Plan Committee Community Development

Date: Wednesday, November 9, 2011

To: Councilman Steve Blair, Brad Devries, Dave Fisher, Glenn Gooding,
Councilman John Hanna, Miriam Haubrich, Terry Marshall, Zena Mitchell,
Roxanne Nielsen, David Quinn, Elisabeth Ruffner, George Sheats and
Gary Worob

From: Tom Guice, Community Development Director
George Worley, Planning Manager
Ryan Smith, Community Planner *RS*

Staff Memo Water Element 1st Draft

PURPOSE:

The Committee has reviewed the General Plan Water Element goals and strategies. The text of this element should now reinforce and support the updated goals and strategies. The language of the text, goals and strategies has been updated by staff for simplification and clarity. Numerical data, tables and charts will be updated as needed by staff in the coming weeks. Be prepared to discuss water as a growth factor and other text you may wish to add.

10.0 WATER RESOURCES ELEMENT

10.1 EXISTING CONDITIONS

Water availability is crucial to maintaining a strong economy and good quality of life. Natural precipitation supplies 100% of the water in the aquifer which serves as the primary source of water for the City of Prescott.

Under the Arizona Groundwater Code of 1980, the State of Arizona established five Active Water Management Areas to ensure that groundwater would not be depleted beyond the level being recharged, a condition defined as "safe yield." The City of Prescott water service area is located within the Prescott Active Management Area (AMA) along with Prescott Valley, Chino Valley, the Yavapai-Prescott Indian Tribe, Dewey-Humboldt and county areas.

Communities within the AMA draw groundwater based on rights, goals and policies established by the groundwater law and must demonstrate a 100-year assured water supply (AWS) through a program aimed at new development with the AMA. Management plans administered by the Arizona Department of Water Resources (ADWR) establish a water management strategy emphasizing conservation, replacement of existing groundwater, renewable supplies, recharge, and water quality management by all users within the AMA. Safe yield is the goal by the year 2025. Private domestic use wells are exempted from the 1980 Groundwater Code.

In 1998 the Arizona Department of Water Resources (ADWR) determined that the Prescott AMA was no longer in a state of safe yield. This determination capped the amount of groundwater which could be used by the respective jurisdictions within the AMA as a source of assured water for new development.

The City of Prescott water service area accounts for about 8.6% of the land within the Prescott AMA. The groundwater basin aquifer within the AMA appears to be interconnected. Therefore, drawdown in other parts of the Prescott AMA will contribute toward decreased water tables in the Prescott water service area.

Prescott and surrounding communities are in an Upland Desert region currently in a drought condition. Figure 10-1 indicates that the AMA has experienced a net loss of water from the aquifer.

FIGURE 10-1 Predicted Change in Aquifer Storage (ADWR Modeling Report No. 12)

Year	2005	2015	2025
Overdraft	-11,200	-12,000	-11,400

Acre Feet/Year

A.R.S. 9-461.05.

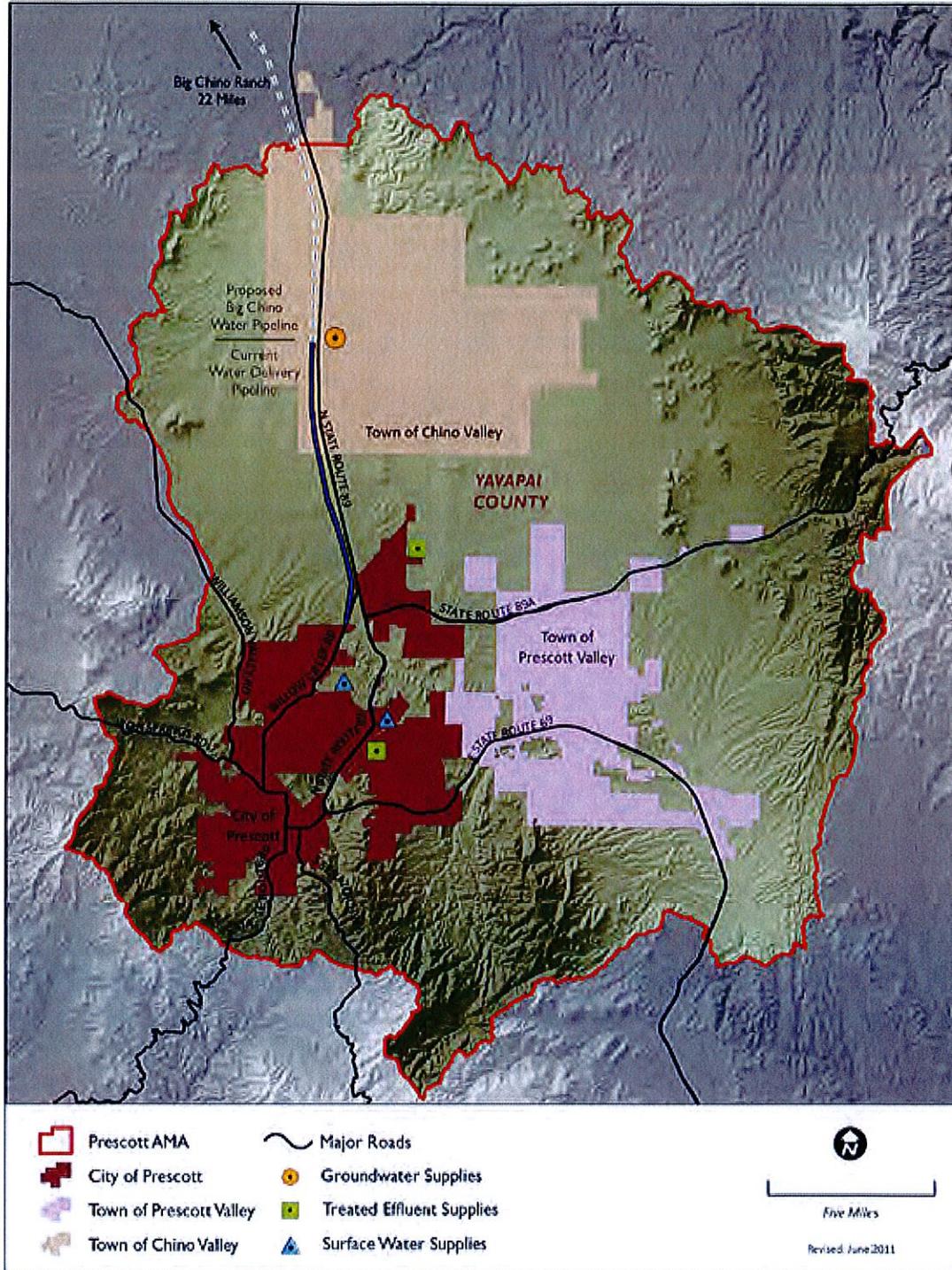
5. A water resources element that addresses:

(a) The known legally and physically available surface water, groundwater and effluent supplies.

(b) The demand for water that will result from future growth projected in the general plan, added to existing uses.

(c) An analysis of how the demand for water that will result from future growth projected in the general plan will be served by the water supplies identified in subdivision (a) of this paragraph or a plan to obtain additional necessary water supplies.

Figure 10-2 Prescott Active Management Area



The State's AMA safe yield is a groundwater management goal, which attempts to achieve and maintain a long-term balance between the amount of groundwater withdrawn and the annual amount of natural and artificial recharge in the AMA (see ARS §45-561.12). The Prescott AMA has not achieved safe yield, therefore, the current rate of drawdown is not sustainable over the long term.

10.2 LEGALLY AND PHYSICALLY AVAILABLE WATER

10.2.1 Legal Availability

Due to the restrictions imposed by the 1980 Groundwater Code and the 1998 declaration of water mining, communities within the AMA must develop additional water supplies to demonstrate the 100 year assured water supply for approved new development. Additional water rights acquired must meet standards of legal and physical availability as recognized by the state water code. Water supply is legally available when documentation exists securing the rights to a specific amount and source of water.

10.2.2 Physical Availability

The physical availability of water resources is dependent upon natural conditions such as the amount of precipitation, evaporation, natural recharge, geology, etc. It is also dependant on the demand placed on the resource by all water users. Since the water policies pursued by an individual jurisdiction affect all jurisdictions in the AMA, water policies are a topic of major regional interest. Regional cooperation and coordination will be necessary to maintain an assured water supply for the City and the region. A regional coordinating body, the Yavapai County Water Advisory Committee has been established with members representing the AMA and local jurisdictions.

The City of Prescott has pursued an aggressive water management policy since 1985 and has invested in numerous strategies to secure both the legal and physical availability of water for existing and projected water users within the City of Prescott water service area. These resources include groundwater (including "type II" rights)*, surface water, Irrigation Grandfathered Rights (IGFR) credits, and effluent recharge. Among the City's water portfolio is the legal right to import up to 8068 acre-feet per year from the Big Chino sub basin (ARS §45-555E and F). The current water resources legally and physically available to the City are presented in figure 10-3.

Figure 10-3 Estimated Current water Supplies Available for Development - City of Prescott Water Service Area (ADWR Decision and Order 2009) [REDACTED]

Groundwater designated by ADWR as legally and physically available:	9,466 af/yr
Estimated effluent recharge recovery and direct use	3,712 af/yr
Surface Water recharge and recovery Granite & Willow Creeks (net)	1,733 af/yr
Imported Groundwater	** 8,068 af/yr
Total legally and physically available water supply	15,200 af/yr

*Note: Prescott has type II Water Rights for 3169 acre feet, but these are limited to commercial or industrial development and are not available for residential development. The City's water portfolio includes IGFR credits but these are committed to other uses. The City also has Hassayampa River and Del Rio Spring surface water claims of approximately 2769 acre feet but has no plans (as of 2003) to assert and tap those water claims. **Imported groundwater is subject to the construction of infrastructure and input from the public.

Without tapping importation rights, the city's current legal and physical availability of groundwater and alternative water sources can cover existing uses and projected allocations to all platted parcels in the water service area. This takes into consideration 10,800 acre feet of water that had been previously committed for preliminary subdivision plats approved prior to August 1998.

Since the declaration that the AMA is not in safe yield, the City has taken a conservative approach to the allocation of water to new development and has set up an annual "water budget" of 200-acre feet which can be allocated to new development. This budget and the policies underpinning it are reviewed and updated by the City Council each year.

10.3 FUTURE GROWTH AND WATER DEMAND

Population growth and development anywhere within the AMA will affect the aquifers and the AMA goal of reaching safe yield. There are a number of specific threats to safe yield:

- population growth and resulting increases in aquifer draw-down
- commitment of groundwater to non-residential uses
- drilling of new exempt (residential) wells within the AMA

In addition, the aquifer has multiple jurisdictions drawing upon it, which increases the difficulty of achieving coordinated water management policies and practices which can collectively contribute to safe yield for the entire AMA. As mentioned previously, the City of Prescott accounts for approximately 8.6% of the land area of the Prescott AMA. Development patterns and policies in other jurisdictions within the AMA differ from those of the City of Prescott. The City anticipates the need to continue to work with regional water forums and implement a regional coordination strategy.

Prescott's projected population of 53,623 residents by 2025 assumes a moderate average annual growth rate of 2%. Meeting the water needs of these residents will require that the City optimize existing groundwater supplies through conservation and maximize alternative water supplies such as reuse or recharge of treated effluent. To meet the demands of the growing population and satisfy the safe yield mandate for the AMA, the City of Prescott anticipates the need to develop additional water sources including importation. Water rights have been secured and infrastructure is currently being explored to facilitate importation of water from the Big Chino Basin aquifer, located just north of the Prescott AMA.

Concerns relating to the importation of water include monetary, social and environmental costs. Economic impacts include the costs of infrastructure, methods of financing and securing of water rights. Social impacts include the effects on quality of life and public services caused by population growth fed by imported water. Environmental impacts include the direct effect of pipeline construction or the affects of increased urbanization on the land, habitats and air quality.

10.3.1 Effluent Supplies

Effluent has become an important water resource for the City of Prescott. When treated, effluent can be used for certain applications, such as irrigation of large turf areas, which reduces demand on groundwater supplies. Currently, the City supplies effluent to golf courses within the municipal service area. Effluent can also be used to recharge the aquifer through the use of recharge basins, where the treated effluent water is cleansed through the natural polishing process. The City of Prescott has operated an effluent recharge facility near the airport since 1988. Between 2000 and 2010 the City has recharged an average of 2,500 acre feet per year of effluent.

Additional methods to optimize this resource include increasing the amount of effluent available for recharge by limiting the amount of new turf that must be irrigated, periodic review of effluent sale rates, possible penalties to customers who exceed their allotment and improved collection of wastewater in areas that are currently on septic systems.

10.3.2 Water Conservation

The City's existing water conservation program addresses the need for individuals to conserve water through wise water use practices. This program is currently posted on the City's website (www.cityofprescott.net). The City adopted water budget policy requires that new allocations of water be within the available resources. Conservation measures that could yield water savings include limiting the additional sale of effluent and using the effluent to increase recharge, reducing the amount of lost and unaccounted water, maintain of an incentive billing structure, and further expansion of public education. Existing policies should be reviewed and updated as necessary. Proposed new policies will require development, including public debate, and subsequent adoption.

10.3.3 Additional Water Supplies

Serving the anticipated population growth with water has been considered and incorporated in the City's Alternative Water Budget and in the ADWR Third Management Plan for the Prescott AMA. Importation could balance the overdraft and assist the goal of safe yield. However, even with importation, a degree of unpredictability exists. The current drought and its potential duration is relevant in ongoing water resources management. This climate condition, in combination with long distance water importation, creates a potential pitfall in that such additional water could be used to support increased urbanization beyond what available water resources could support.

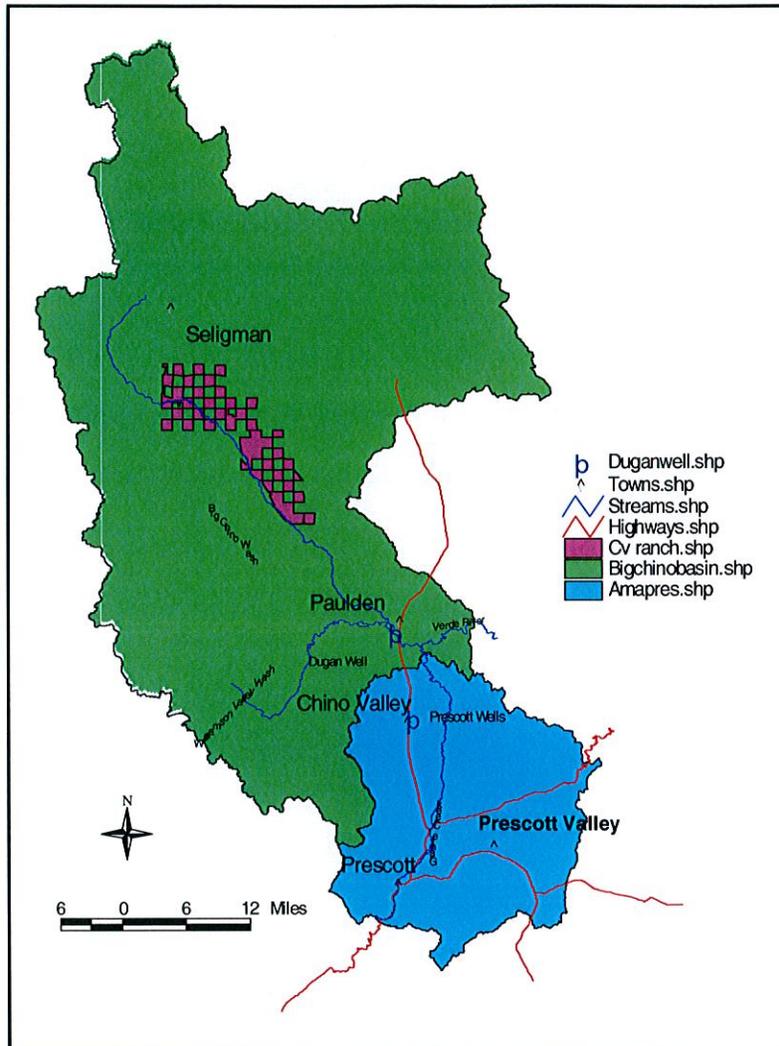
The drought could cause those distant sources to literally or legally "dry up", placing the community and its larger population in even greater jeopardy of water supply shortfalls. Existing and potential residents may be at risk that our water supply may be beyond the control of the City of Prescott. Imported water, by policy, should be treated as a reserve to maintain a safe yield position. It should be used in place of local water and not to support further urbanization.

Concerns exist if legal and financial limitations to water importation can be overcome. The resolution of this controversy ultimately should lie in the hands of the citizens. Public information regarding the nature of the water situation is available. Public financing measures such as revenue bonding are voted on by the citizens of Prescott. An informed and participating citizenry is the best guide to future actions.

10.4 WATER RESOURCES LONG TERM MANAGEMENT PLAN

As of September 13, 2011 litigation ended with a City of Prescott Decision and Order (D&O) from the Arizona Department of Water Resources (ADWR), which describes the sources of water that the City is entitled to. The D&O was based on ADWR examination of water that is physically, legally, and continuously available for 100 years. Now that the City's current and future water rights have been determined, the formulation of a Long Term Water Management Plan must develop to manage those resources. This plan would take into account all supplies recognized in the D&O which include groundwater, surface water, treated effluent, and imported supplies. All supplies will need to be assessed for their best use and to secure water for many future generations.

Figure 10-6 Prescott AMA and Big Chino Sub basin



10.5 WATER RESOURCES GOALS AND STRATEGIES

- Goal 1.** Improve appropriate water law and regulations.
- Strategy 1.1** Communicate to state-level officials and representatives the need for improved and appropriate water law and regulations.
- Goal 2.** Provide a reliable water supply in quantity and quality for the city.
- Strategy 2.1** Develop a Long Term Water Management Plan.
 - Strategy 2.2** Annually review the city water budget and limit new allocations to match available resources according to the City's water budget policy.
 - Strategy 2.3** Reduce lost and unaccounted for water through monitoring and appropriate action.
 - Strategy 2.4** Pursue additional conservation measures for possible addition to the City's existing Water Conservation Program.
 - Strategy 2.5** Expand Water Conservation Program Public Education Component.
 - Strategy 2.6** Maintain the incentive billing structure tied to consumption to encourage conservation.
 - Strategy 2.7** Continue to encourage conservation and individual rainwater harvesting to reduce potable water use for outdoor watering through native plant choices and the addition of rain water catchments on businesses and residences.
 - Strategy 2.8** Conduct a study to identify pharmaceutical pollution in supply wells and recharged effluent.
- Goal 3.** Improve water supply reliability by optimizing all effluent supplies.
- Strategy 3.1** Provide no potable water or effluent for irrigation use by future golf courses or other turf intensive uses unless a clear benefit to the City of Prescott or region can be demonstrated.
 - Strategy 3.2** Periodically re-evaluate effluent rates and rate structure to all customers and impose penalties for use over allotments. Rates should be tied to market value in Arizona and tiered to discourage waste. Rates should cover all costs to the City related to effluent delivery.
 - Strategy 3.3** Continue to maximize effluent recharge programs and pursue efficient water management practices.
 - Strategy 3.4** Extend sewers wherever feasible to recover effluent from water customers presently on septic systems based upon a case-by-case cost-benefit analysis.

Goal 4. Develop Additional Water Supplies for the city.

- Strategy 4.1** Pursue all water resources in sufficient quantities to reduce depletion of local water reserves and contribute to the achievement of “safe yield” by the AMA.
- Strategy 4.2** Develop funding strategies and investigate additional water impact fees, within state limitations, to finance new water sources and technologies.
- Strategy 4.3** Investigate and implement rainwater macro-harvesting technology for application within the City of Prescott and the Prescott AMA to increase water supply.
- Strategy 4.4** Increase the retention capacity of Watson Lake and Willow Lake to the maximum legal limit by dredging or removal of sediments by damming portions of each lake and employing earthmovers.

Goal 5. Include the citizens in decision making on water policies.

(Specific strategies are needed to support this goal.)

- Strategy 5.1** Provide continuing public information regarding water policy questions.

Goal 6. Continue to participate in regional coordination Programs regarding water resources.

- Strategy 6.1** Invite other jurisdictions within the Prescott AMA to join in developing an integrated plan for achieving safe yield.
- Strategy 6.2** Continue to take an active role in regional water forums.
- Strategy 6.3** Partner with other jurisdictions and fund studies to identify conservation measures and additional water resources.

Re: General Plan

Howard Mechanic [howard@capsuleconnection.com]

Sent: Wednesday, November 02, 2011 7:08 PM

To: Smith,Ryan

Ryan,

At the last General Plan Committee there was agreement to add a statement about Prescott seeking better state legislation regarding water.

I suggest that the Plan be a little more focused such as:

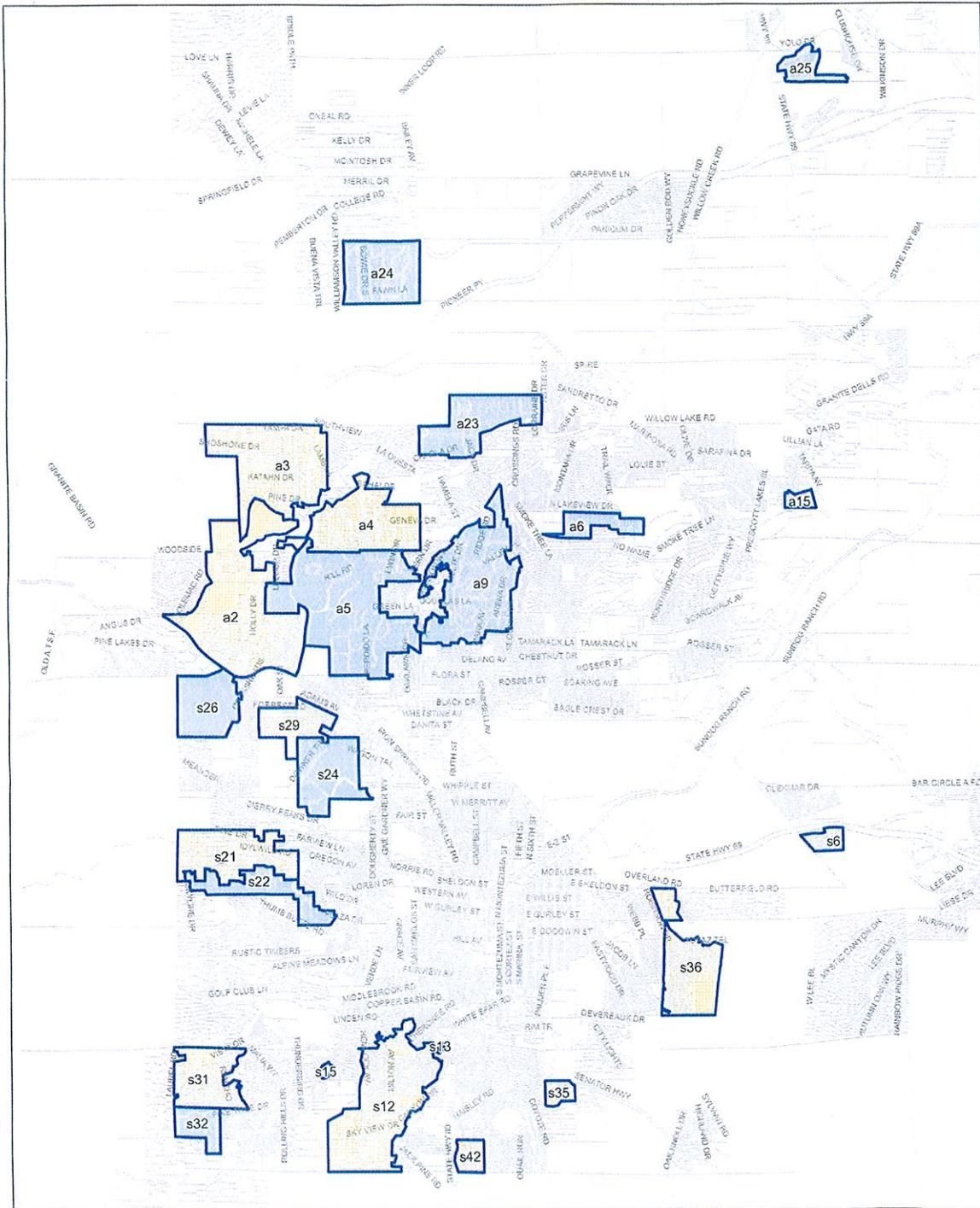
Prescott will seek assistance from the State Legislature in obtaining better state law regarding water resources. Specifically,

1. State law should recognize the connections between groundwater and surface water. There should be a better method to determine priority water rights among those claiming either groundwater or surface water.
2. State law should enable and promote protection of important water bodies, such as the Verde River. The state should not allow a situation where rights to use water will lead to a situation where the ecology of the Verde River is threatened, or even where portions of the river may go dry.

I would appreciate it if you would forward this to the Committee for consideration.

Thanks,

Howard Mechanic



- Parcels
- Streets
- Service Classification**
 - Need classification
 - Unsewered in City
 - Unsewered in County

This GIS map is a limited representation of facilities intended for planning purposes only. It is not intended for construction or other purposes requiring greater positional accuracy.

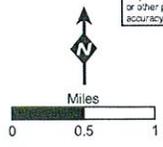


Figure 2.3

CITY OF PRESCOTT WASTEWATER COLLECTION SYSTEM VS. UNSEWERED AREAS

Wastewater Collection System Model Study

DRAFT