Update on the Alternative Water Portfolio

Presentation to City Council
October 27, 2015

CITY OF PRESCOTT
ARIZONA

Presentation Topics

- ❑ What is Alternative Water?
- ❑ Purpose of Today's Presentation
- ❑ Recap of January 2015 Water Portfolio Update
- ❑ Review of Overall Water Portfolio
- ❑ Alternative Water Availability – Challenges
- ❑ Summary of Overall Water Availability
- ❑ Summary of Alternative Water Availability
- ❑ Policy Aspects
- ❑ Alternative Water Availability – Possible Actions
- ❑ Other Actions re the Overall Water Portfolio
- ❑ Next Steps

What is Alternative Water?

Alternative Water - supplies from sources ***alternative*** to pumping additional groundwater from the Prescott Active Management Area (PrAMA), such as:

- surface water
- reclaimed water (treated effluent)
- imported groundwater

Note:

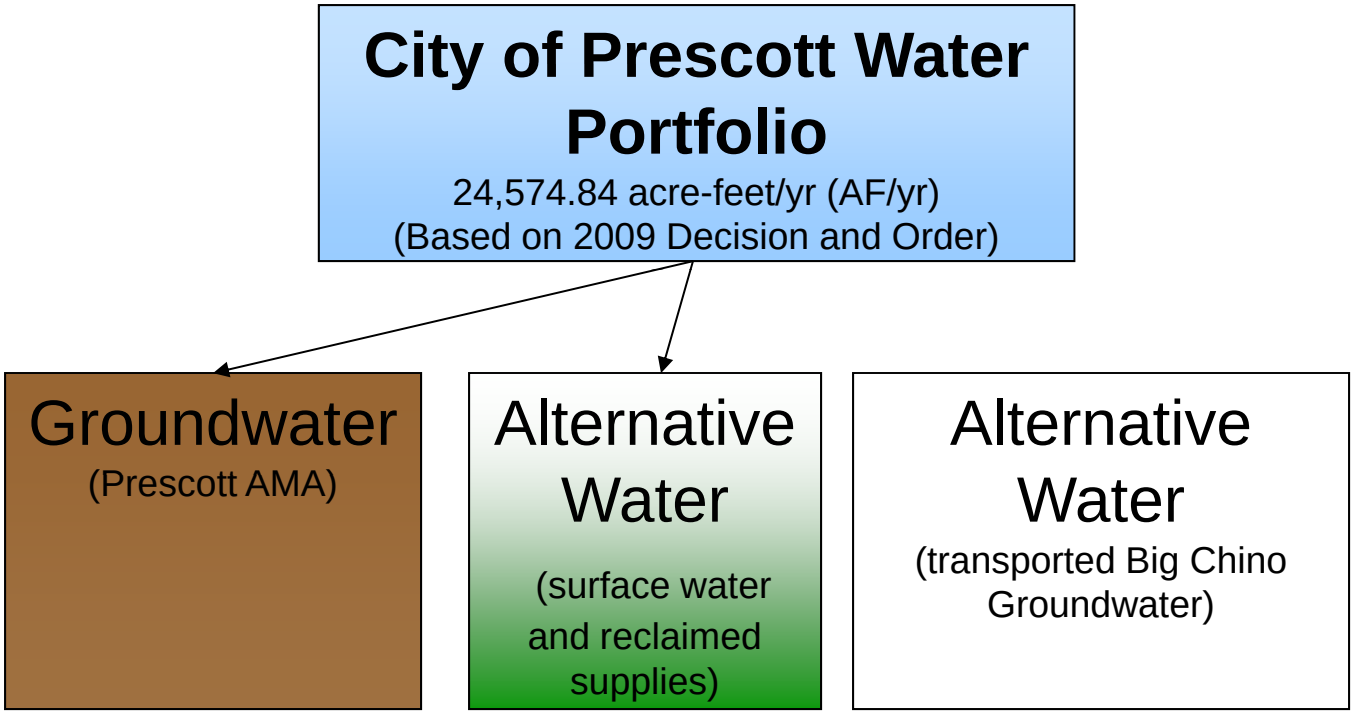
The PrAMA is unique among the three safe-yield AMAs. During the early 1990s, when the Department of Water Resources (ADWR) was developing the Assured Water Supply (AWS) Rules, there was insufficient hydrologic data to make a definite determination as to whether the PrAMA was at safe-yield or mining groundwater. Due to this uncertainty, the AWS Rules, adopted in 1995, were not invoked until more data was collected.

On August 28, 1998, the Director of ADWR made a preliminary determination that the PrAMA was not at safe-yield. ADWR made a final determination on January 12, 1999, that the PrAMA was no longer at safe-yield. Additional residential development other than that already recognized as being served by current and committed groundwater, or otherwise associated with a recognized pre-1998 plat, would require alternative water supplies.

Purpose of Today's Presentation

- Update the availability of alternative water for new development and identify associated challenges
- Provide the current status of the Calendar Year 2015 alternative water budget (100 AF), and active requests for new allocations
- Outline possible policy actions for Council consideration

Overall City Portfolio – 2009 D&O



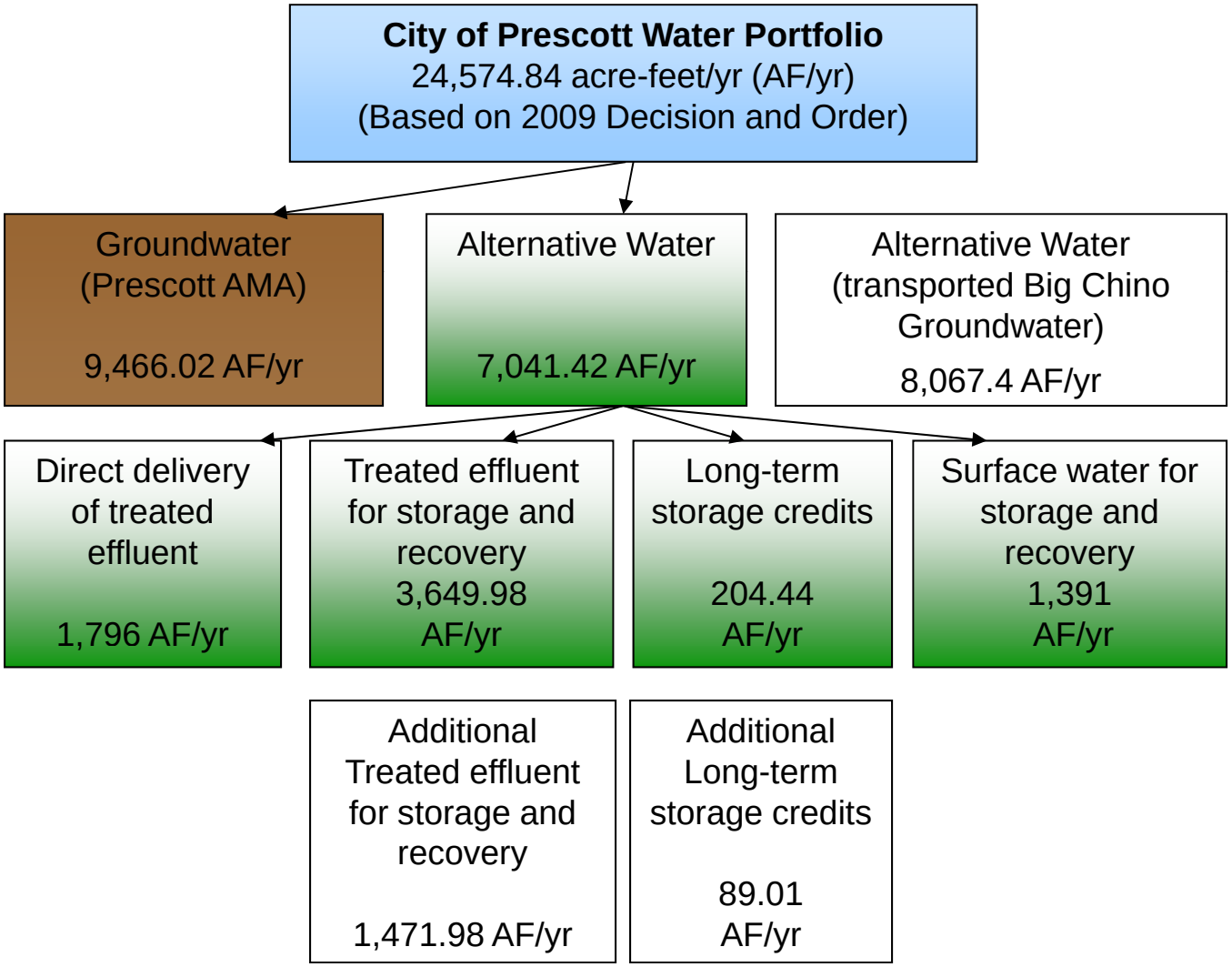
Recap of January 6, 2015, Presentation

- The Groundwater (GW) category of the overall water portfolio has significant supplies available to support development (current and committed, and groundwater allowance for pre-1998 plats)

- Within the Alternative water category of the overall water portfolio three conditions exist:
  - Imported (Big Chino) alternative supply is not physically available (connected to the City's existing distribution system)
  - Surface water supplies <u>were not increased</u> in the ADWR 2009 Decision & Order, and are not achieving the projected 1,391 AF/year
  - Reclaimed water (treated effluent) supplies <u>were increased</u> in the 2009 D&O, but neither the return flows nor the volumes recharged are meeting D&O projections

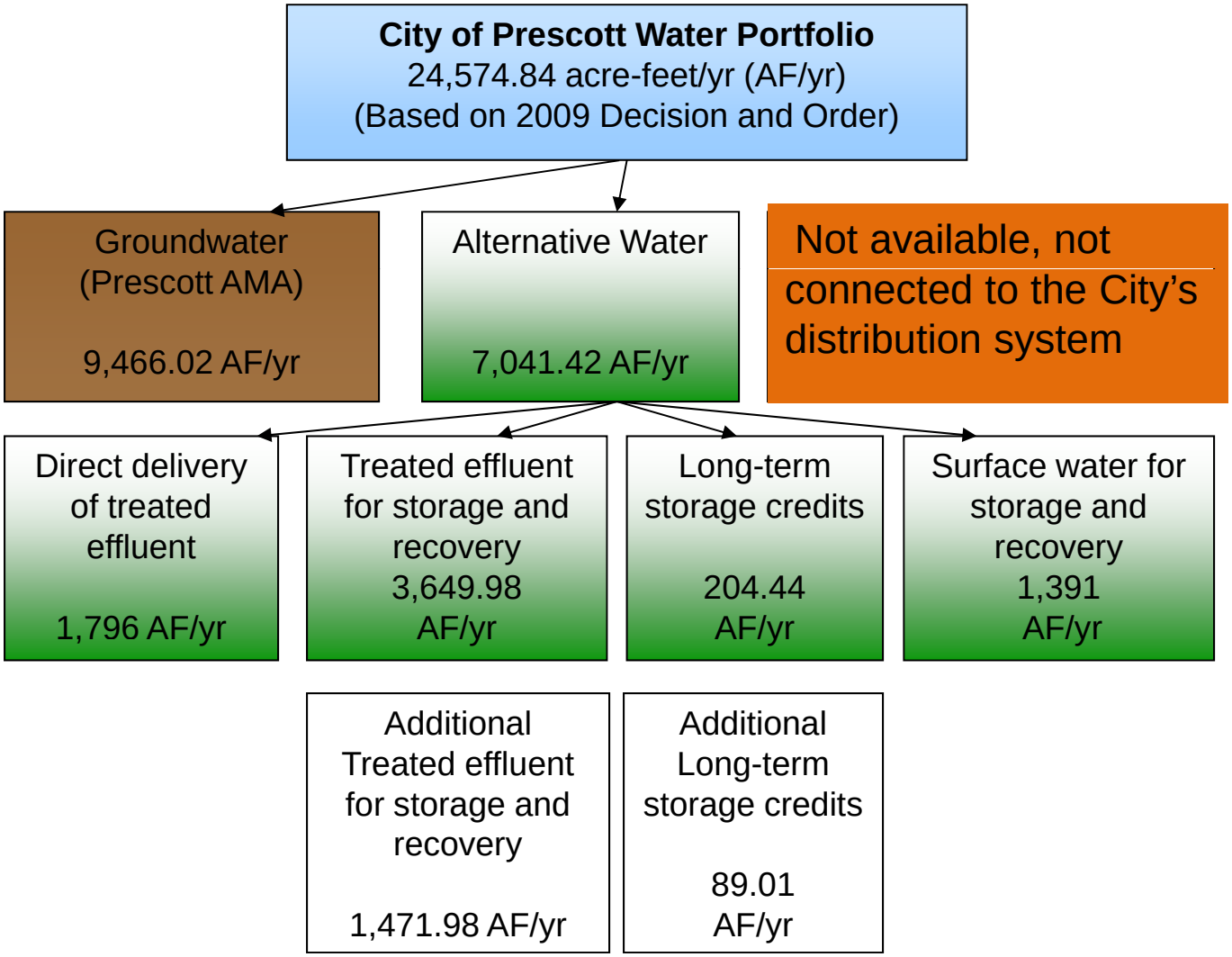
- After considering these conditions, Council approved a Calendar Year 2015 alternative water budget of 100 AF versus 200 AF in each prior year.
- The balance of available alternative water (at that time) was 314 AF, to be reduced by allocations made in CY 2015 (up to 100 AF).
- This 214 AF is the entirety of the alternative water quantity that remained (which was not in a reservation), after which no further would be available for new development.

Overall City Portfolio – 2009 D&O



1 Acre-foot = 325,851 gallons

Current Status of 2009 D&O Quantities



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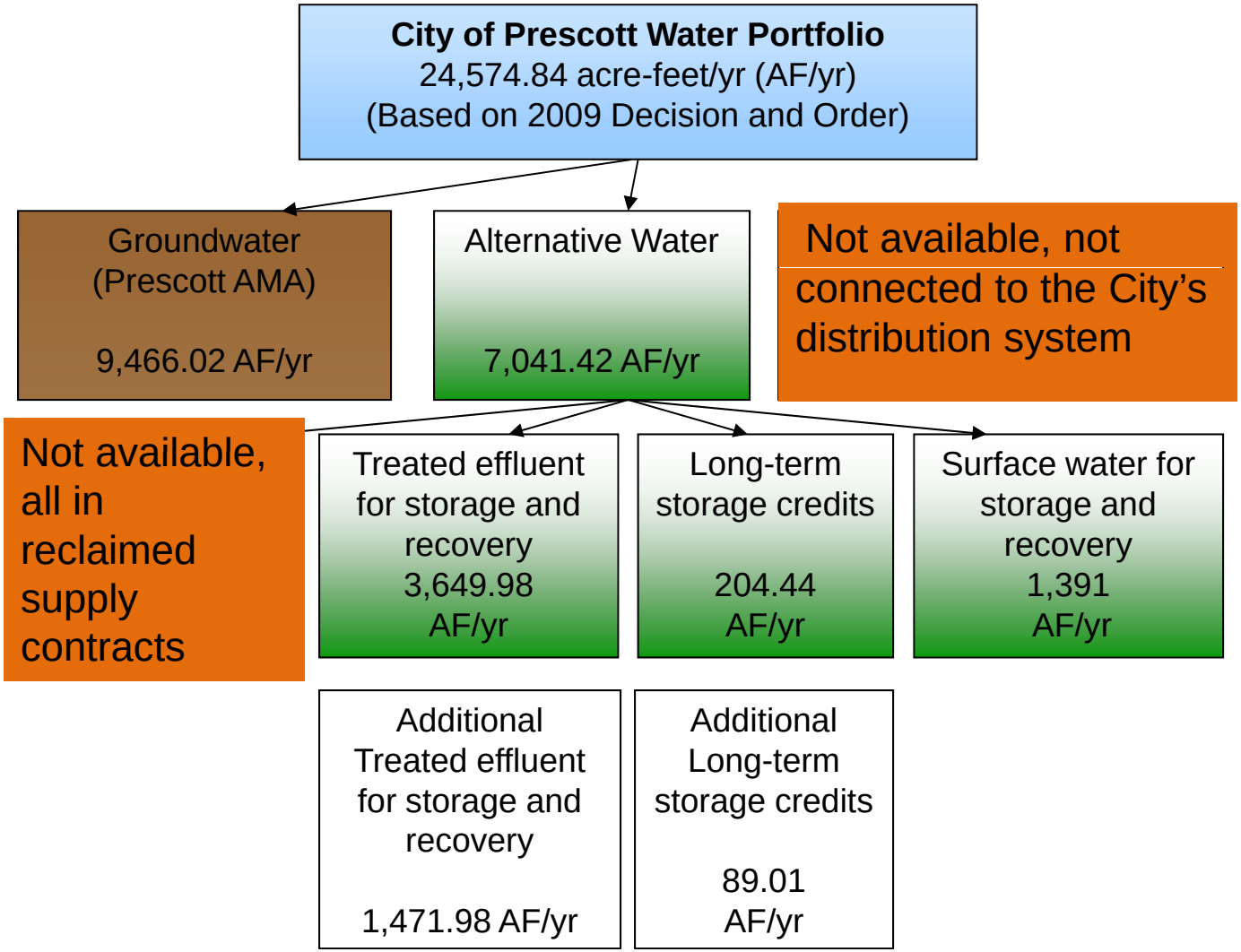

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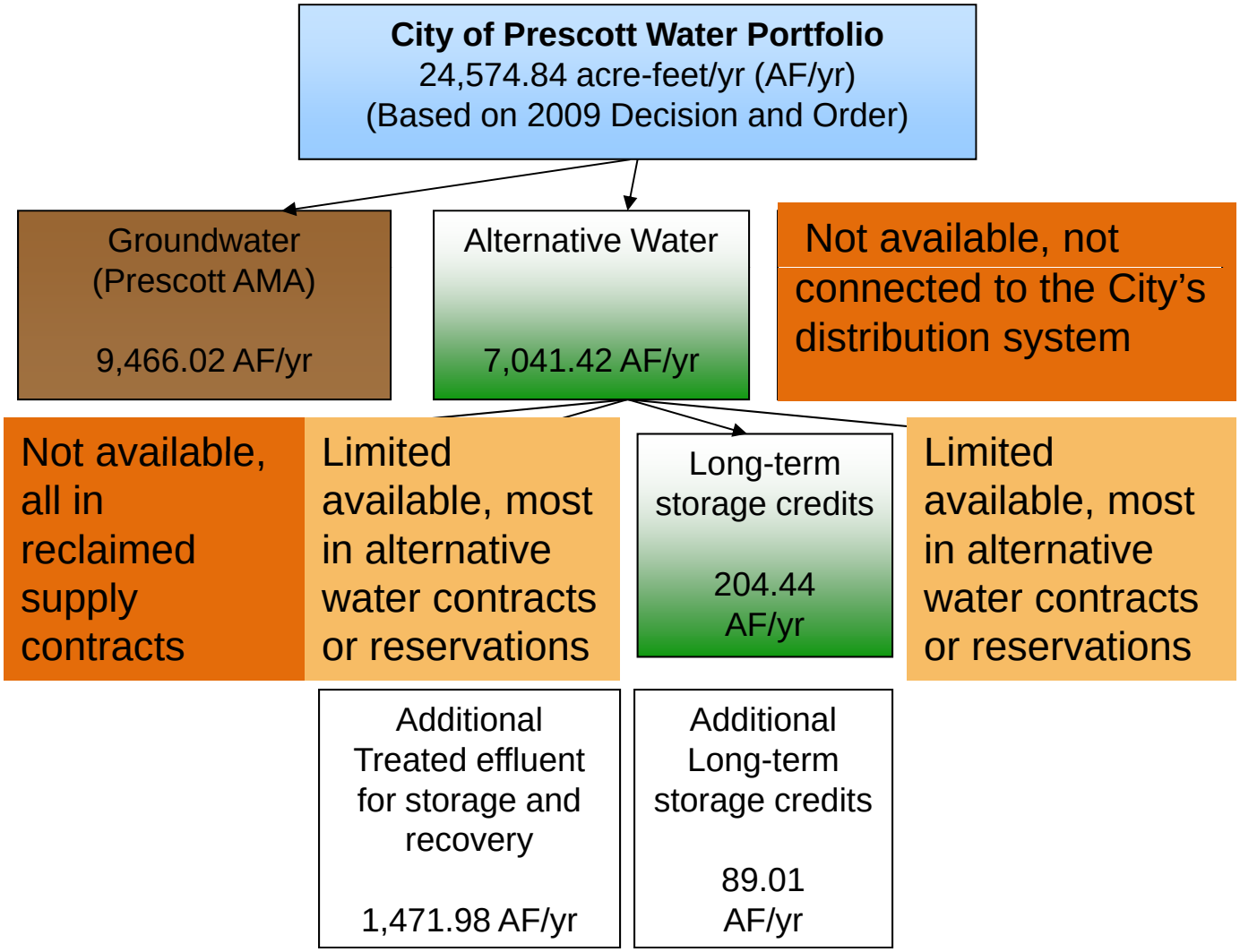

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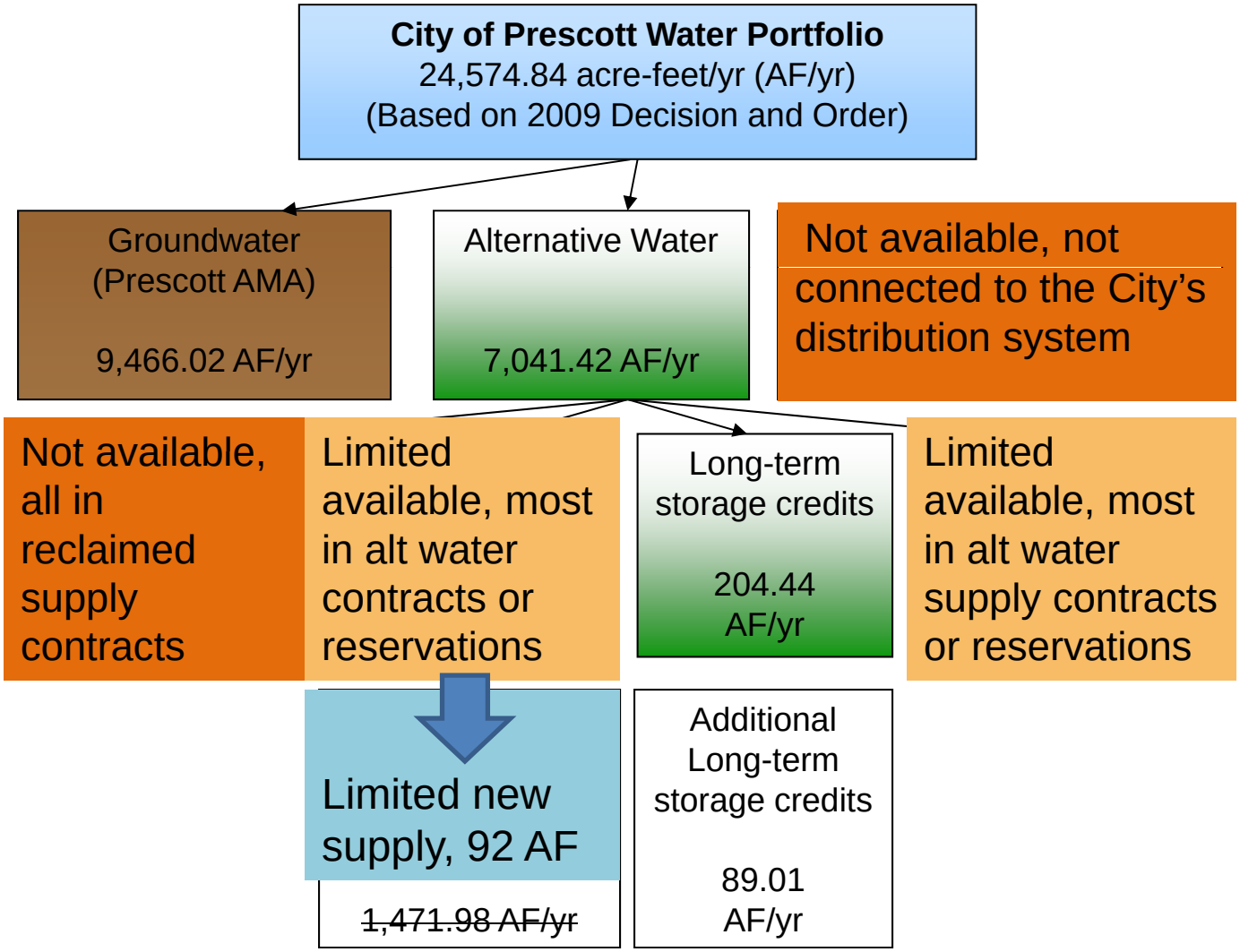

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Current Status of 2009 D&O Quantities

City of Prescott Water Portfolio
24,574.84 acre-feet/yr (AF/yr)
(Based on 2009 Decision and Order)

1 Acre-foot = 325,851 gallons

Groundwater (Prescott AMA)

9,466.02 AF/yr

Alternative Water

7,041.42 AF/yr

Not available, not connected to the City's distribution system

Not available, all in reclaimed supply contracts

Limited available, most in alt water contracts or reservations

Limited new supply, 92 AF

~~1,471.98 AF/yr~~

Currently under review and in discussions with ADWR.

Limited available, most in alt water supply contracts or reservations

Alternative Water Availability - Challenges

Causes of the Challenges

- Big Chino water is not yet being transported for use
- Projections for the 2009 D&O envisioned the Big Chino project to be online in 2009; without the City's portion being available for use, the reclaimed supply corresponding to growth using Big Chino water has not materialized (1,471.98 AF/yr)
- Further, the City has extensive areas where potable supplies are in use without return flows to the wastewater treatment plants (23,029 water accounts, 18,678 wastewater accounts in January 2015)

- Surface water supplies were not increased in the 2009 D&O. Recharge from this source is subject to seasonal availability (climate) and the City's operations of the reservoirs. On average, less than the projected 1,391 AF/yr has been recharged annually.

CY 2015 Alternative Water Budget - Water Service Agreement Applications

Table 1: Projects with a WSA application submitted (updated 10/26/2015)

WSA Application No.	Applicant	Project	Volume Requested (ac-ft)	Market (80 ac-ft)	Workforce (20 ac -ft)	Alt. Water Reservations (ac-ft)
14-007	SJ Holms, LLC	4 multifamily dwelling units	1.0	X		
14-009	ERAU	New 66 unit residence hall, 15 AF of increased water use since 1997, and campus build out.	32.5-95.8[1]	X		
~~15-001~~	~~Rock Lane Partners~~	~~70 unit apartment complex~~	~~14~~[2]	X		
15-003	Mendel	Single family residence from lot split	0.35	X		
15-005	Ryan	Single family residence	0.35	X		
15-006	Orefice	8 unit apartment complex	2.0	X		
15-007	Moody	Single family residence from lot split	0.35	X		
15-008	Schnitzius Family Trust	Single family residence from lot split	0.35	X		
15-009	LKD Housing Ventures	Single family residence	0.35			X
15-010	James 110 Investments, LLC	286 lot subdivision (former Centerpointe South)	100.1	X		
15-011	Hassayampa Holdings of Prescott, LLC	101 unit apartment complex	25.25	X		
15-013	Territorial 12 LLC	12 condominium units	3	X		
15-014	Diversified Development, LLC	253 unit apartment complex	63.25	X		**Evaluating possible contractual entitlement (1974 agreement)**
15-015	Randy Thomas	Additional demand to current groundwater allocation	1.5	X		
15-016	Robert Beyea	Relocation of duplex to create 1 SFR and a duplex on same lot.	0.5	X		
Total			**>230.85**	**>230.50**	**0**	**0.35**

Table 2: Other projects presented to PAC for which WSA applications have not been submitted (updated 10/26/2015)

PAC No.			Proposed			
	Applicant	Project	Volume Required (ac-ft)	Market (80 ac-ft)	Workforce (20 ac-ft)	Alt. Water Reservations (ac-ft)
15-077	Land Resource (SLF, III- Storm Ranch)	410 single family units	143.5(65 ac-ft additional)[1]	X		City Contract No. 2008-013 for 79.45 ac-ft (expires 7/10/2017).
15-089	Paul Armenta	New apartment complex	3.5	X		
15-102	Robert Tubbert	Mountain Dream Apts	1.0	X		
15-106	Giving Tree Wellness Center	Greenhouses for medical marijuana	TBD*	X		
15-108	Diocese of Arizona, Inc	Chapel Rock Baseball Field	TBD*	X		
15-009	Sims Family Trust	Lot Split	0.35	X		
15-112	Judy Numbers	Convert racket club to condos	1.5	X		
15-114	I. D. Investors, LTD	Remodel 6 units at Ridge Retreats	1.5	X		
Total			**>151.35**	**>151.35**	**0**	**79.45**

Summary of Overall Water Availability
Current and Future

General Plan (Ratified by Voters August 2015)

Physically Available Water (2015)	Housing Units
2009 Decision and Order Alternative Water (92 AF)	263
Current Alternative Water Balance (2005 D&O 222 AF)	634
1998 Plats - Grandfathered Groundwater	
Final Plats	3,398
Preliminary Plats	3,456
Reservation for Residentially Zoned Unwatered Tracts	1,920
Subtotal	9,671
Imported Water (not currently physically available)	
City portion of Big Chino Project is 54.1% (4,365 AF)	12,471
Subtotal	12,471
TOTAL POTENTIAL FUTURE HOUSING UNITS	22,142

Summary of Alternative Water Availability

- The supply of the City's renewable resource (alternative water) has been drawn down to support development since 1999
- As of January 1, 2015, approximately 314 AF remained; when used, the supply of alternative water will have been exhausted
- 100 AF of the 314 AF were budgeted by Council for new development in CY 2015 (80 AF for Market and 20 AF for Workforce)
- Seven (7) applications for 2.6 AF have been received which, according to current policy, may be eligible for administrative approval
- Fifteen (15) other applications are presently in-hand totaling over 300 AF; these would require Council approval

Making Alternative Water Available for New Development – Policy Aspects

1. A reservation of alternative water was originally made in 2006, and adjusted downward in 2009 to reflect developability (terrain, etc) of vacant residentially zoned tracts within the City limits. Note that this reservation was a policy action, and did not vest any such lands with a property right.

   Is this the highest and best use of this block of water, or should the reservation be shifted to Big Chino water, for longer-term future availability?

2. What should be the priorities for allocating the limited alternative water remaining to various types of development?
   - Single family subdivision
   - Apartments/multi-family
   - Residential lot splits

3. How much water is available for non-residential (commercial and industrial)?

Policy Aspects (cont'd)

4. What (development) performance criteria should be applied to new water service agreements?
5. Should all new development be required to connect to City sewer (in the absence of a contractual agreement that otherwise entitles the property to water service)?
6. What criteria should be applied to extending current water service agreements with expiration dates?
7. What should be the process for accepting Assured Water Supply Certificates brought to the City (pledged IGFRs)?
8. Should the availability and pricing of water presently available at the City's EZ Street water station be changed?
9. What changes should be made to accepting and approving applications for alternative water?

Alternative Water Availability

Possible Actions for Consideration

1. Temporarily suspend accepting new applications for alternative water
2. Prioritize allocations of remaining water by type of development, for example:
   - Apartments/multi-family (not retirement facilities)
   - Commercial/industrial
   - Residential lot splits
   - No new subdivisions (a substantial inventory exists of approved but unbuilt units)
3. Apply the priorities to current active applications and projects that have been presented to PAC
4. Require all new development to connect to City sewer, whether served by groundwater or alternative water (if not otherwise contractually entitled to water service)

Possible Actions for Consideration (cont'd)

5. Shift the reservation made for residentially zoned unwatered tracts within the City limits to the future Big Chino source; along with the current unreserved alternative water (the 314 AF remainder identified as of January 6, 2015), make it available for current active applications and projects that have been or will be presented to PAC
6. Evaluate the availability of alternative water already allocated to residential development (the 0.1 AF markup) for commercial and industrial development, and manage this quantity to support such development
7. Prohibit connection to City water without well abandonment
8. Prohibit well drilling on properties served/to be served with City water
9. City Code changes, where required, to implement the foregoing actions
10. Resume accepting applications for allocation of alternative water to new development within the new guidelines adopted

Actions re the Overall Water Portfolio

Items to Research and Address in the next Decision and Order Modification

1. Assess the increased use of surface water supplies for recharge and recovery to determine if the current 1,391 AF/year can be increased
2. Assess long term storage (LTSA) and the possible return of the transferred volumes to North Nugget (624 AF, not to exceed 700 AF)
3. Determine whether some subdivisions or other allocations covered by historical agreements can be shifted to Current and Committed Groundwater demand
4. Assess the reclaimed supplies within the direct delivery portion of the portfolio

Next Steps

<u>November 10, 2015, or subsequent Council Meeting</u>

- Consideration/adoption of a Council resolution amending the Water Management Policy to implement selected immediate actions

<u>Continuing Action/Future Council Meetings</u>

- Identify a block of alternative water to be made available for commercial and industrial development (from the 0.1 AF markup made on residential to date and other policies)
- Draft City Code changes required to implement other selected actions
- Research and address items necessary for the next Decision & Order Modification
- Continue work via Comprehensive Agreement No. 1 on monitoring and modeling necessary to demonstrate the effects, if any, of withdrawal of Big Chino groundwater on the Upper Verde River

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