



PALMDALE WATER DISTRICT

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February 13, 2012

***Agenda for a Meeting
of the Water Supply & Reliability Committee of the Palmdale Water District
Committee Members: Gordon Dexter-Chair, Gloria Dizmang
to be held at the District's office at 2029 East Avenue Q, Palmdale
Friday, February 17, 2012
3:00 p.m.***

NOTE: To comply with the Americans with Disabilities Act, to participate in any Board meeting please contact Dawn Deans at 661-947-4111 x103 at least 48 hours prior to a Board meeting to inform us of your needs and to determine if accommodation is feasible.

Agenda item materials, as well as materials related to agenda items submitted after distribution of the agenda packets, are available for public review at the District's office located at 2029 East Avenue Q, Palmdale. Please call Dawn Deans at 661-947-4111 x103 for public review of materials.

PUBLIC COMMENT GUIDELINES: The prescribed time limit per speaker is three-minutes. Please refrain from public displays or outbursts such as unsolicited applause, comments, or cheering. Any disruptive activities that substantially interfere with the ability of the District to carry out its meeting will not be permitted and offenders will be requested to leave the meeting.

Each item on the agenda shall be deemed to include any appropriate motion, resolution, or ordinance to take action on any item.

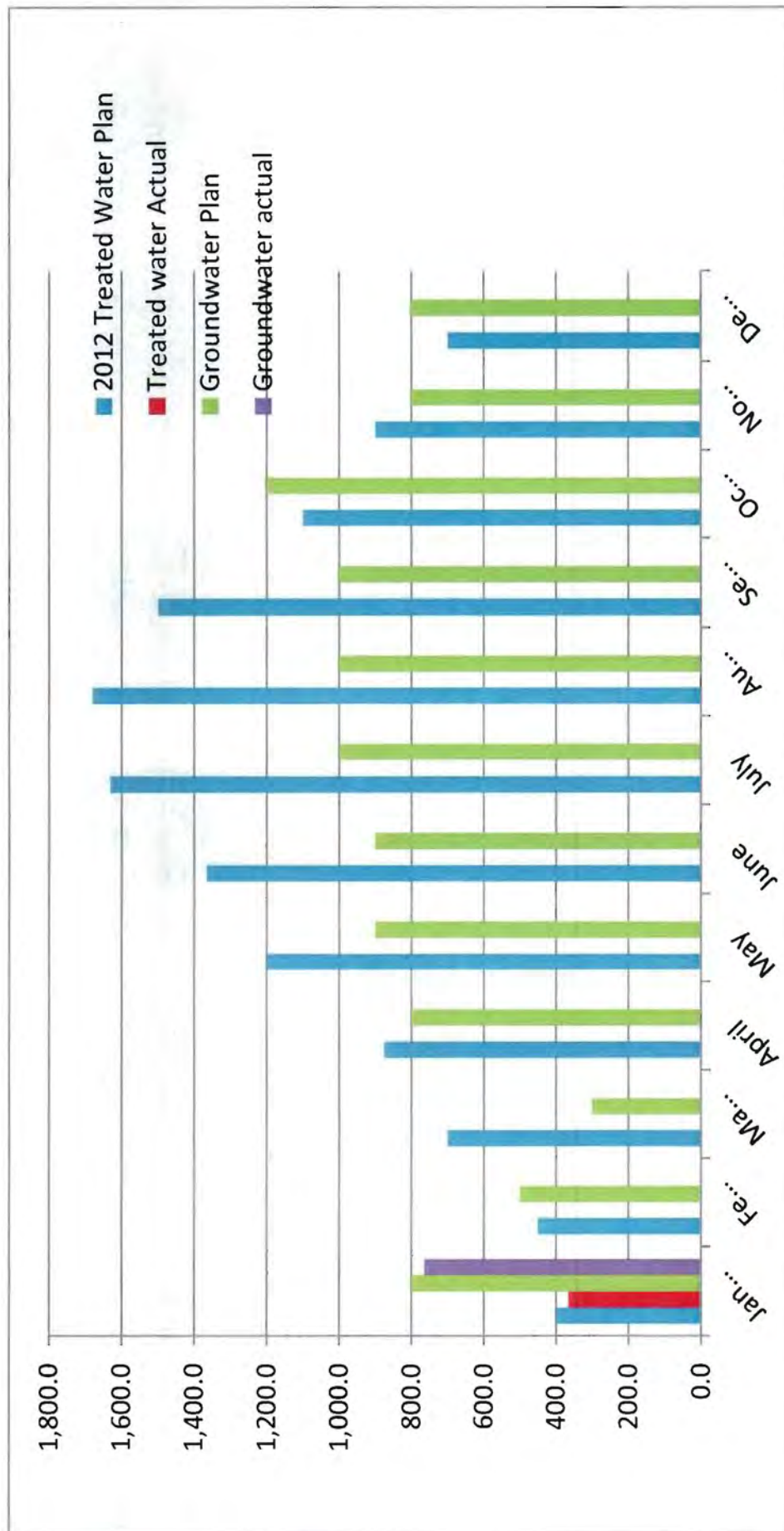
- 1) Roll call.
- 2) Adoption of agenda.
- 3) Public comments.
- 4) Action Items: (The public shall have an opportunity to comment on any action item as each item is considered by the Committee prior to action being taken.)

- 4.1) Consideration and possible action on approval of minutes of meeting held November 8, 2011.
- 4.2) Presentation of monthly water demand and supply status. (Water & Energy Resources Manager Pernula)
- 4.3) Presentation on overview of water resource activities. (Water & Energy Resources Manager Pernula)
- 5) Project updates.
 - 5.1) Recycled Water Master Plan. (Water & Energy Resources Manager Pernula)
 - 5.2) Strategic Water Resources Plan. (Water & Energy Resources Manager Pernula)
 - 5.3) Water purchase opportunities. (Water & Energy Resources Manager Pernula)
 - 5.4) Water Treatment and Transportation Agreement between Palmdale Water District and Antelope Valley East Kern Water Agency – Acton Water Treatment Plant. (Engineering Manager Knudson)
 - 5.5) Littlerock Dam Sediment Removal Project. (Engineering Manager Knudson)
- 6) Information items.
- 7) Board members' requests for future agenda items.
- 8) Adjournment.



DENNIS D. LaMOREAUX,
General Manager

DDL/dd

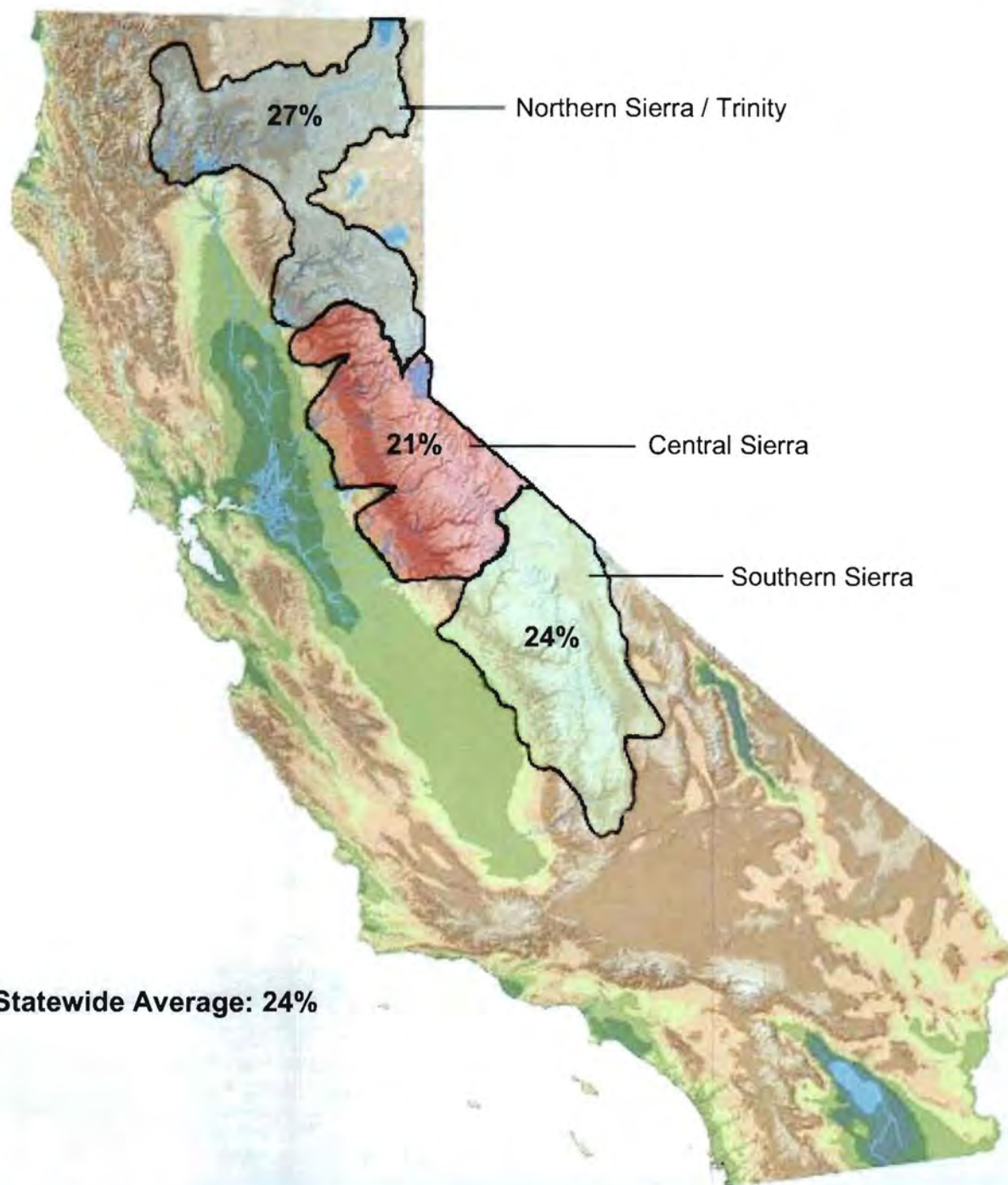






Statewide Summary of Snow Water Content

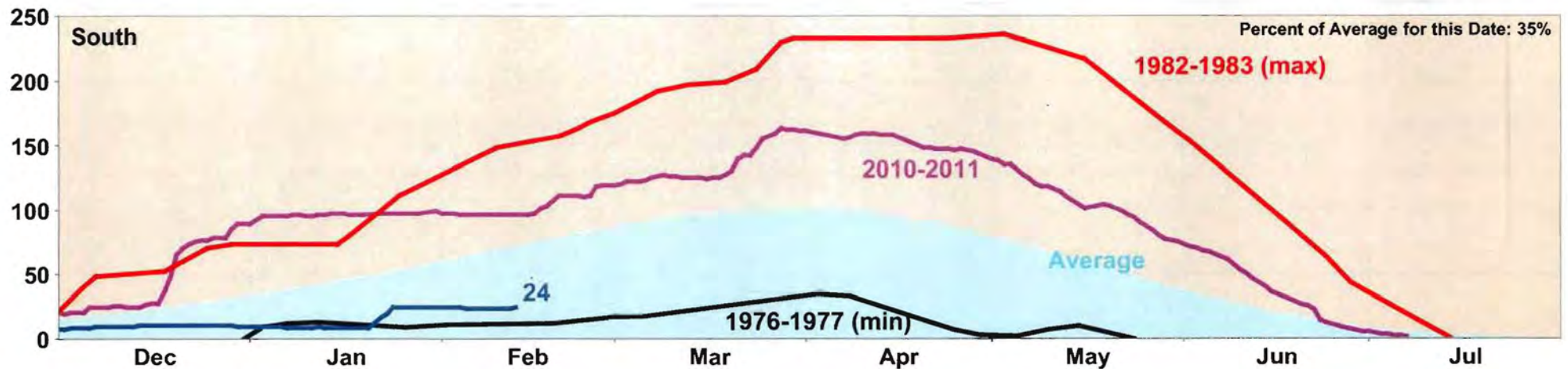
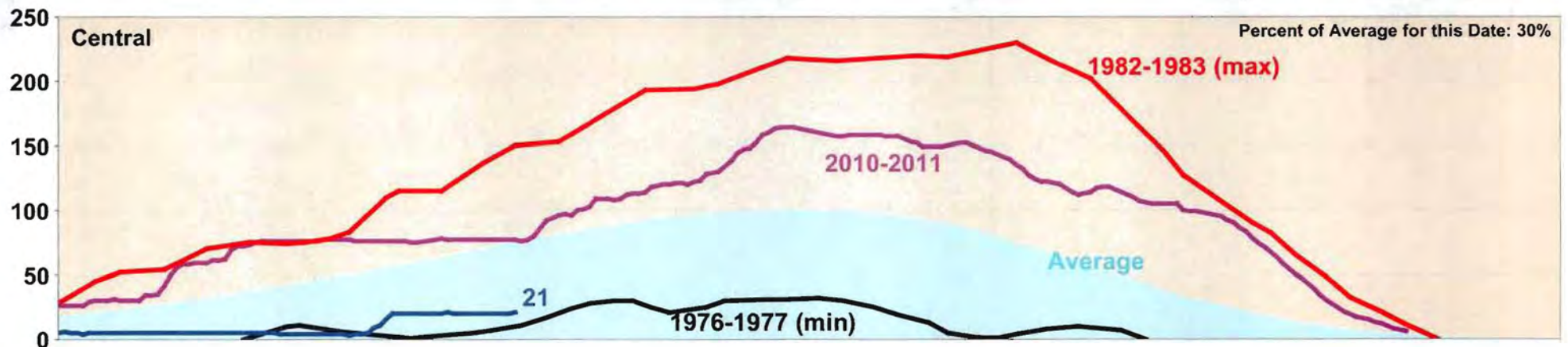
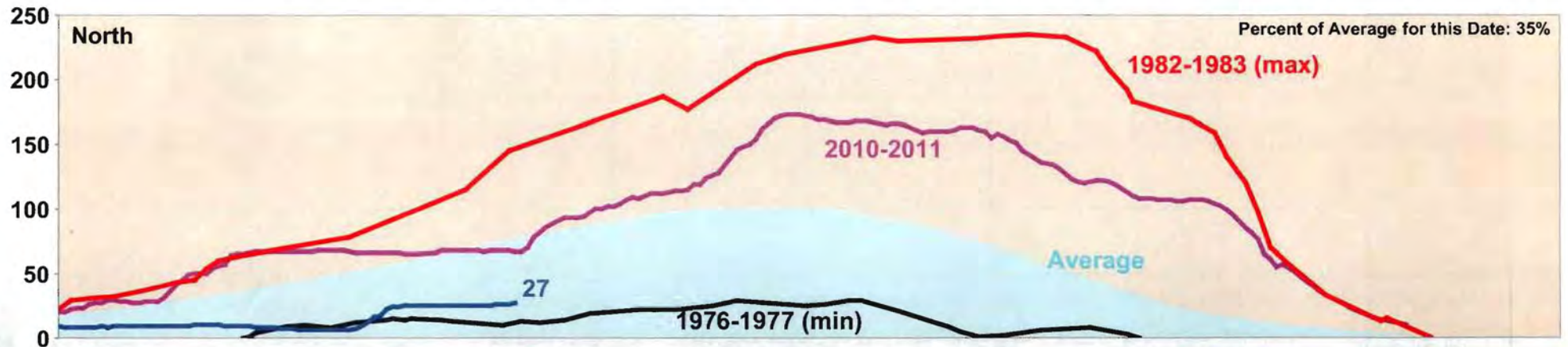
Current Regional Snowpack from Automated Snow Sensors - % of April 1 Average



Statewide Average: 24%

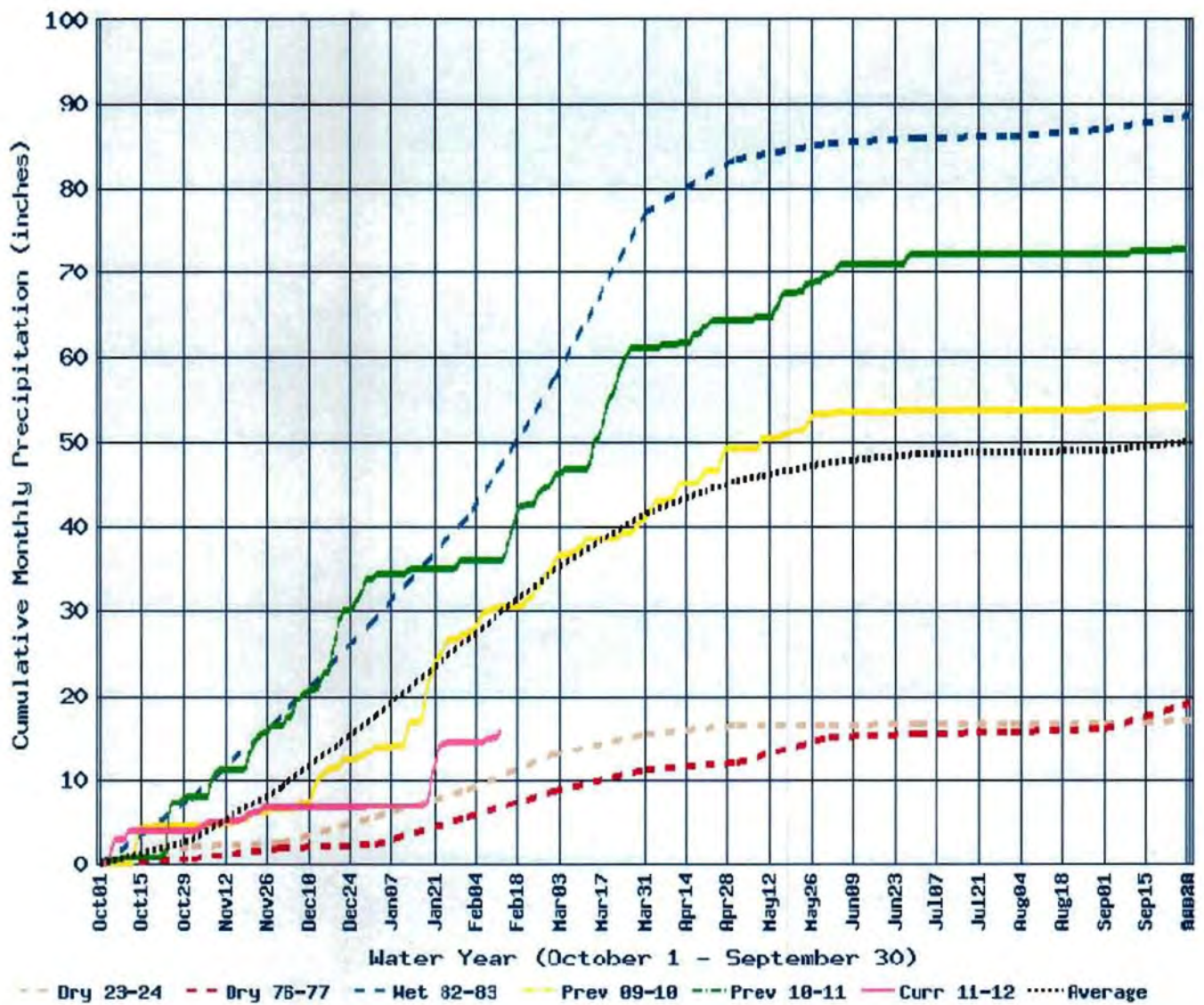
Data as of February 13, 2012

California Snow Water Content, February 13, 2012, Percent of April 1 Average



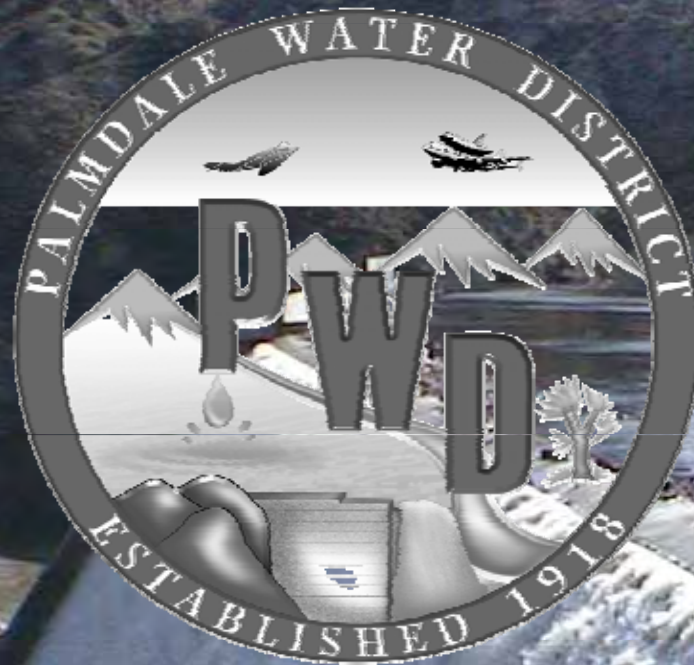
Statewide Percent of April 1: 25%

Statewide Percent of Average for Date: 30%



DRAFT 2012 Water Production Plan @ 50% Allocation

Month	New Surface Water Sources					WTP					Water Production (Groundwater)					Total					Minors	
	Surface	Water	Evaporation	Total	WTP	Water Production (Groundwater)	Total	Minors														
	Carry Over (ac-ft) *	Banking & Exchange (ac-ft) from CO *	dryr + YA (ac-ft)	PWD/SWP (ac-ft)	LTD (ac-ft)	Plan (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)	Plan (ac-ft)	Actual (ac-ft)				
January	0.0	2850.0	0.0	1327.8	0.0	0.00	1,327.8	0.0	400.0	363.8	800.0	764.2	1,200.0	1,128.0	1,050.0	969.0						
February	0.0	0.0	0.0	600.0	0.0	0.00	0.0	0.0	450.0	0.0	500.0	0.0	950.0	0.0	950.0	0						
March	0.0	0.0	0.0	500.0	0.0	0.00	0.0	0.0	700.0	0.0	300.0	0.0	1,000.0	0.0	1,000.0	0						
April	0.0	0.0	0.0	550.0	0.0	-75.00	0.0	0.0	875.0	0.0	800.0	0.0	1,675.0	0.0	1,280.0	0						
May	0.0	0.0	0.0	650.0	0.0	-50.00	0.0	0.0	1,200.0	0.0	900.0	0.0	1,475.0	0.0	1,475.0	0						
June	0.0	0.0	0.0	700.0	0.0	-135.00	0.0	0.0	1,365.0	0.0	900.0	0.0	2,265.0	0.0	1,800.0	0						
July	0.0	0.0	0.0	900.0	0.0	-285.00	0.0	0.0	1,630.0	0.0	1,000.0	0.0	2,630.0	0.0	2,100.0	0						
August	0.0	0.0	0.0	1950.0	0.0	-270.00	0.0	0.0	1,680.0	0.0	1,000.0	0.0	2,680.0	0.0	2,140.0	0						
September	0.0	0.0	0.0	1710.0	0.0	-210.00	0.0	0.0	1,500.0	0.0	1,000.0	0.0	2,500.0	0.0	2,325.0	0						
October	0.0	0.0	0.0	1100.0	0.0	-135.70	0.0	0.0	1,100.0	0.0	1,200.0	0.0	2,300.0	0.0	2,200.0	0						
November	0.0	0.0	0.0	900.0	0.0	-50.00	0.0	0.0	900.0	0.0	800.0	0.0	1,700.0	0.0	1,660.0	0						
December	0.0	0.0	0.0	740.0	0.0	-39.30	0.0	0.0	700.0	0.0	800.0	0.0	1,500.0	0.0	1,520.0	0						
Allocated Total Use:	0.0	2,850.0	0.0	1,327.8	-	(1,250.00)	1,327.80	363.8	12,500.0	10,000.0	10,000.0	764.20	22,500.0	1,128.0	19,500.0	969.0						
Actual C/O from 2011	7,133.0	7,133.0	0.0	0.0	3,500.0	1,250.0	12,780.0	11,000.0	12,500.0	9,000.00	10,000.0	8,235.80	22,500.0	24,000.00	19,500.0	969.0						
Remaining Allocation:	0.0	4,283.0	0.0	11,452.2	3,500.0	0.0	11,452.2	-10,636.2	0.00	-10,636.2	0.0	-8,235.80	0.00	20,372.00	0.0	17,531.0						
Total:	0.0	0.0	0.0	12,780.0	8.0	(1,250.0)	12,780.0	10,000.0	12,500.0	10,000.0	10,000.0	8,235.80	22,500.0	24,000.00	19,500.0	969.0						
AVAILABLE FOR CARRYOVER	0.0	4,283.0	0.0	11,452.2	3,500.0	0.0	11,452.2	-10,636.2	0.00	-10,636.2	0.0	-8,235.80	0.00	20,372.00	0.0	17,531.0						



Water Resource and Supply



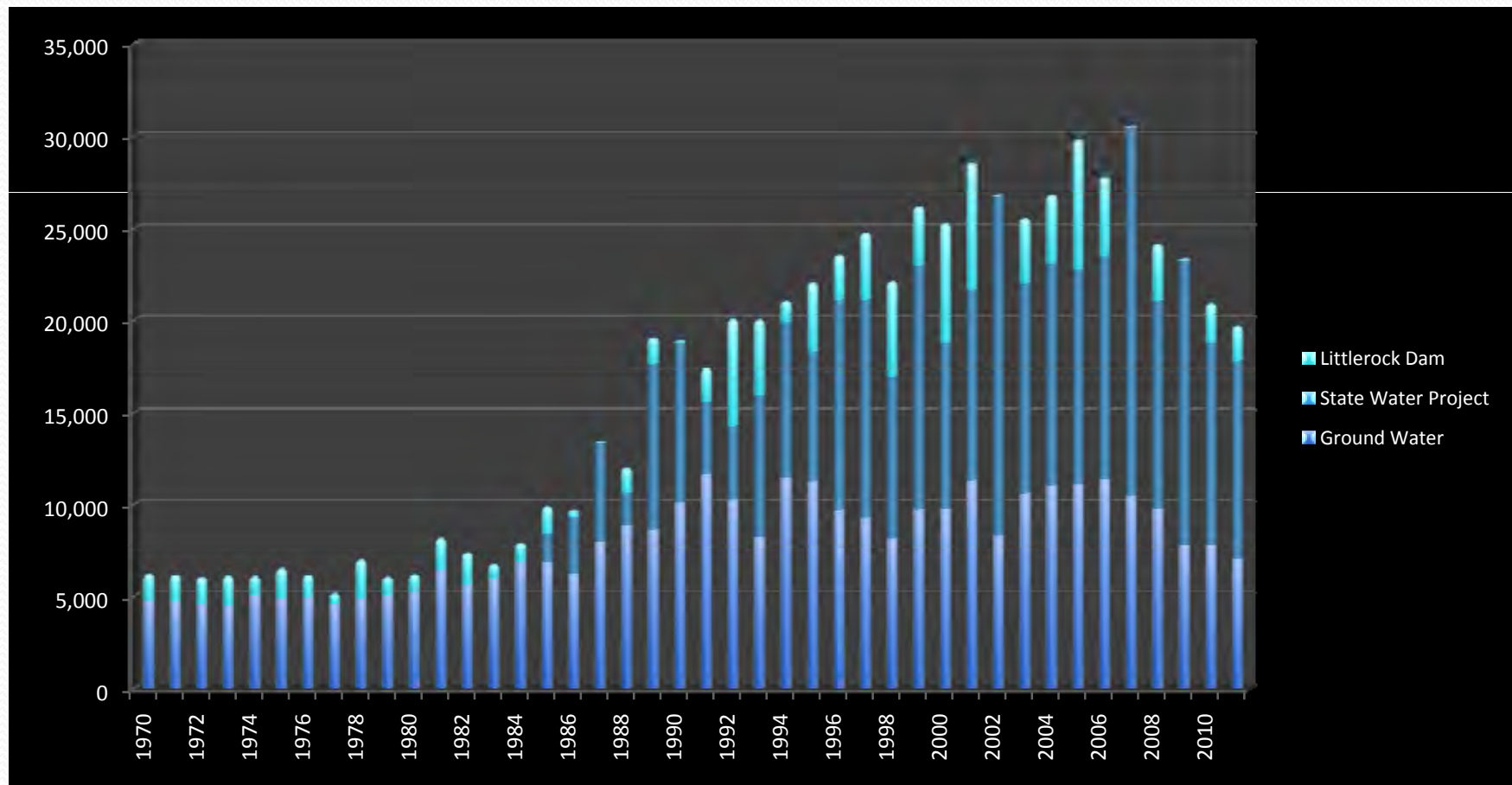
Palmdale Water District currently utilizes three sources of water

- **Local Surface Water from Littlerock Dam**
 - This water is subject to local hydrology and seasonal snow melt from the north slope of the San Gabriel mountains
- **Imported Water From the State Water Project DWR**
 - PWD has a 21,300 acre foot Table A contract quantity with the Department of Water Resources (DWR). This water is subject to annual hydrology in the Feather River Basin, north of Sacramento, and must be pumped out of the bay delta prior to shipment south in the California Aqueduct
- **Local Ground Water**
 - This Water is a historic core water source for the District and is currently under adjudication through the courts

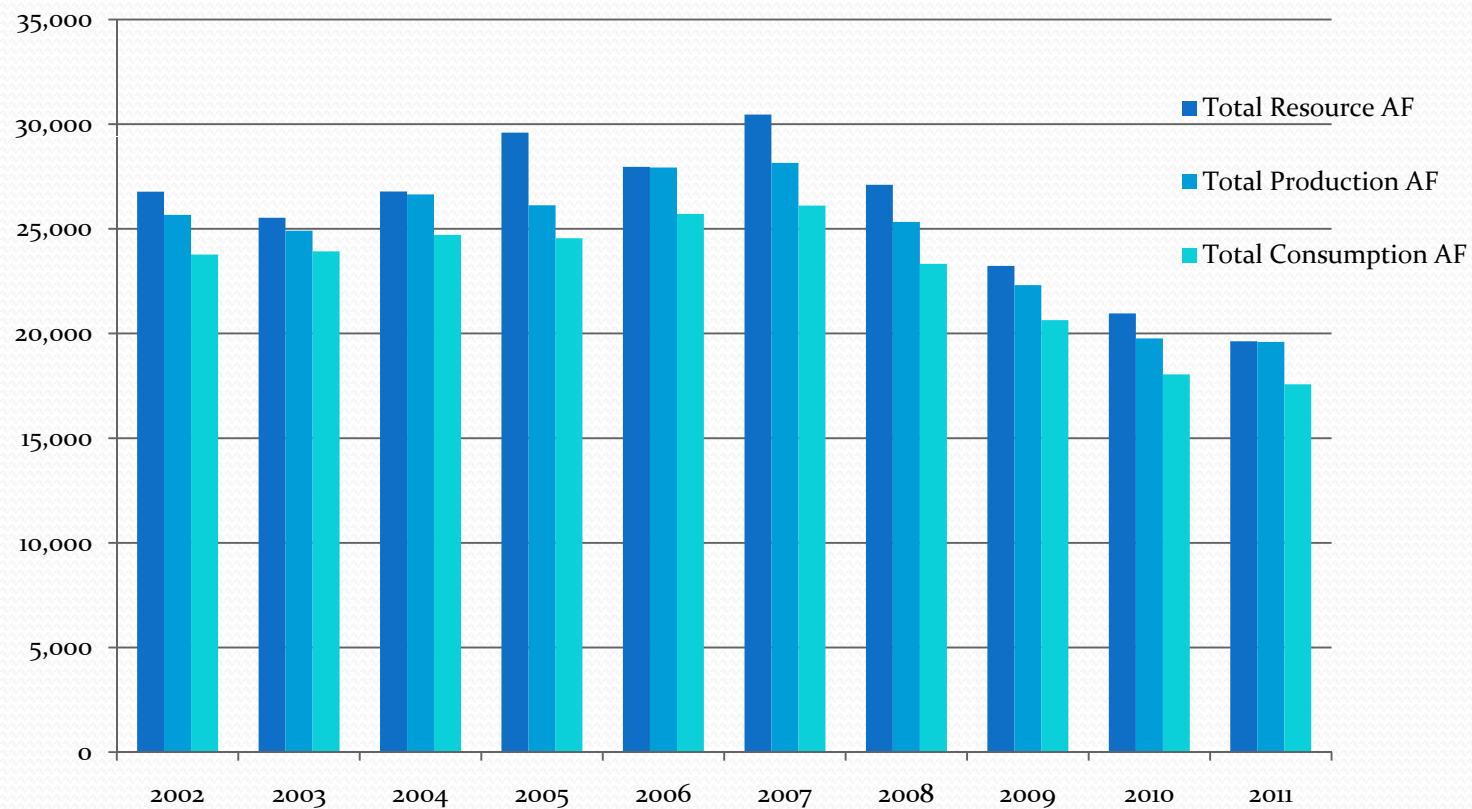
PWD Water Supply Source Components and Quantities In Acre Feet Since 1990

YEAR	SURFACE WATER SWP	GROUND WATER	LITTLEROCK DAM	TOTAL ACRE FEET
1990	8,608	10,099	110	18,817
1991	3,914	11,682	1,758	17,354
1992	4,035	10,296	5,662	19,993
1993	7,761	8,211	4,000	19,972
1994	8,418	11,460	1,122	21,000
1995	6,961	11,276	3,771	22,008
1996	11,434	9,691	2,409	23,534
1997	11,861	9,270	3,595	24,726
1998	8,893	8,135	5,040	22,068
1999	13,277	9,720	3,165	26,163
2000	8,974	9,765	6,500	25,239
2001	10,397	11,302	6,851	28,550
2002	18,480	8,298	0	26,777
2003	11,421	10,608	3,499	25,528
2004	12,076	11,046	3,659	26,781
2005	11,678	11,086	6,866	29,597
2006	12,224	11,359	4,378	27,961
2007	20,030	10,427	0	30,457
2008	14,272	9,786	3,045	27,103
2009	15,388	7,764	78.6	23,231
2010	10,959	7,776	1861	20,956
2011	10,032	7,025	2569	19,626

Source Water comparisons by year

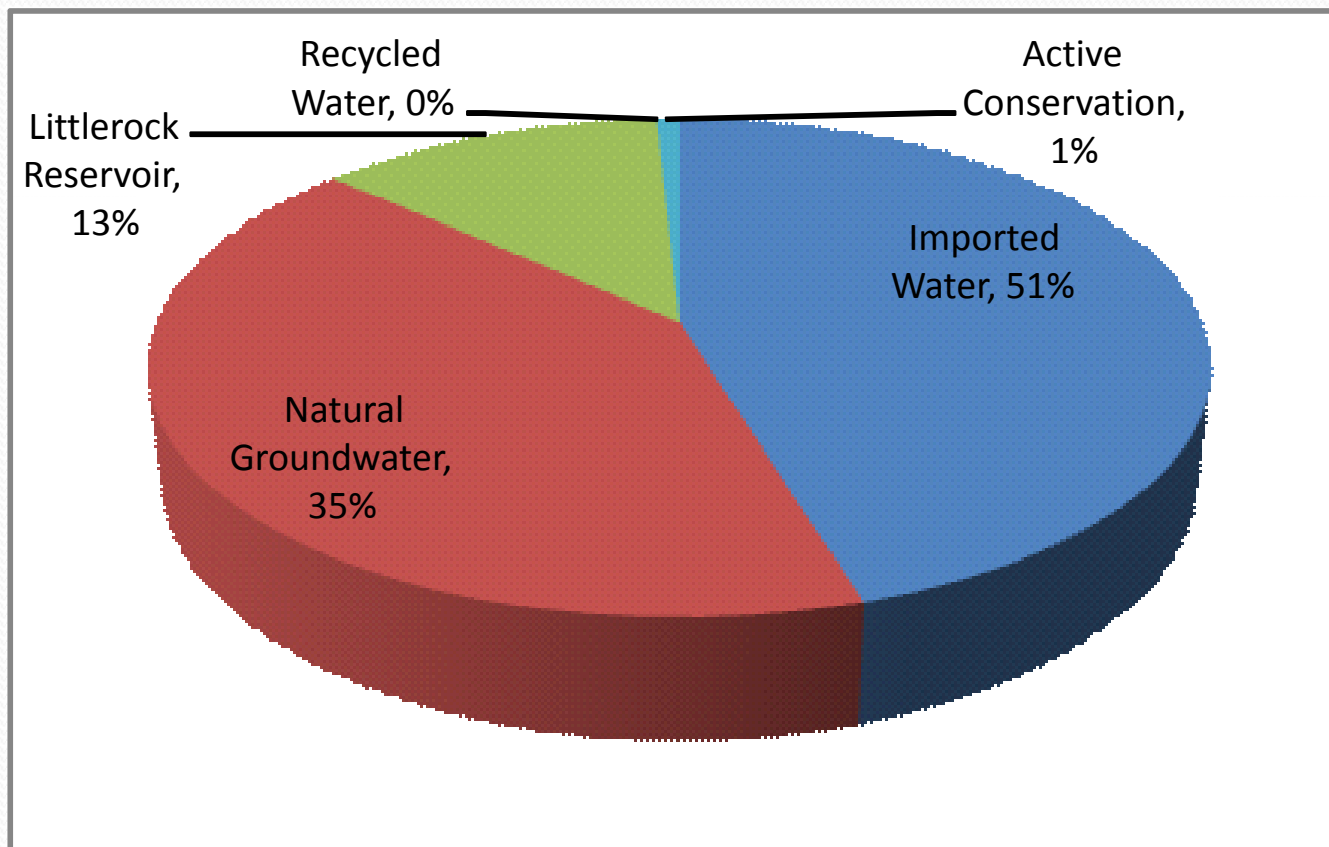


Source Water (Raw water), Production (Treated water introduced into the distribution system), & Consumption (Water sold)



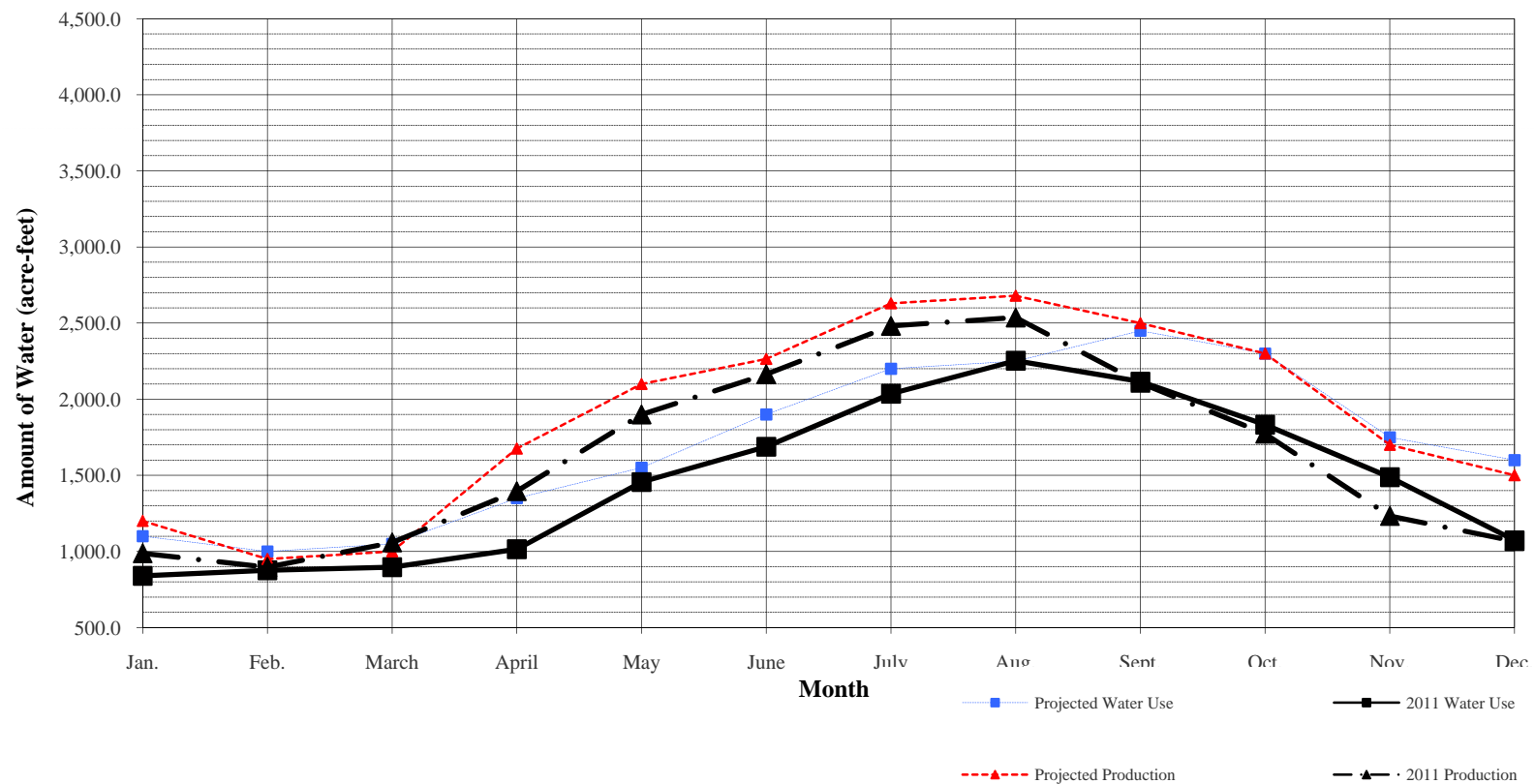
PWD Current Water Supplies

2011 Supply: ~19,626 AFY



2011 ACTUAL MONTHLY PRODUCTION AND USE VERSUS PROJECTIONS

2011 PWD PRODUCTION & CUSTOMER WATER USE





PWD & Regional Planning Documents

- Urban Water Management Plan (UWMP)

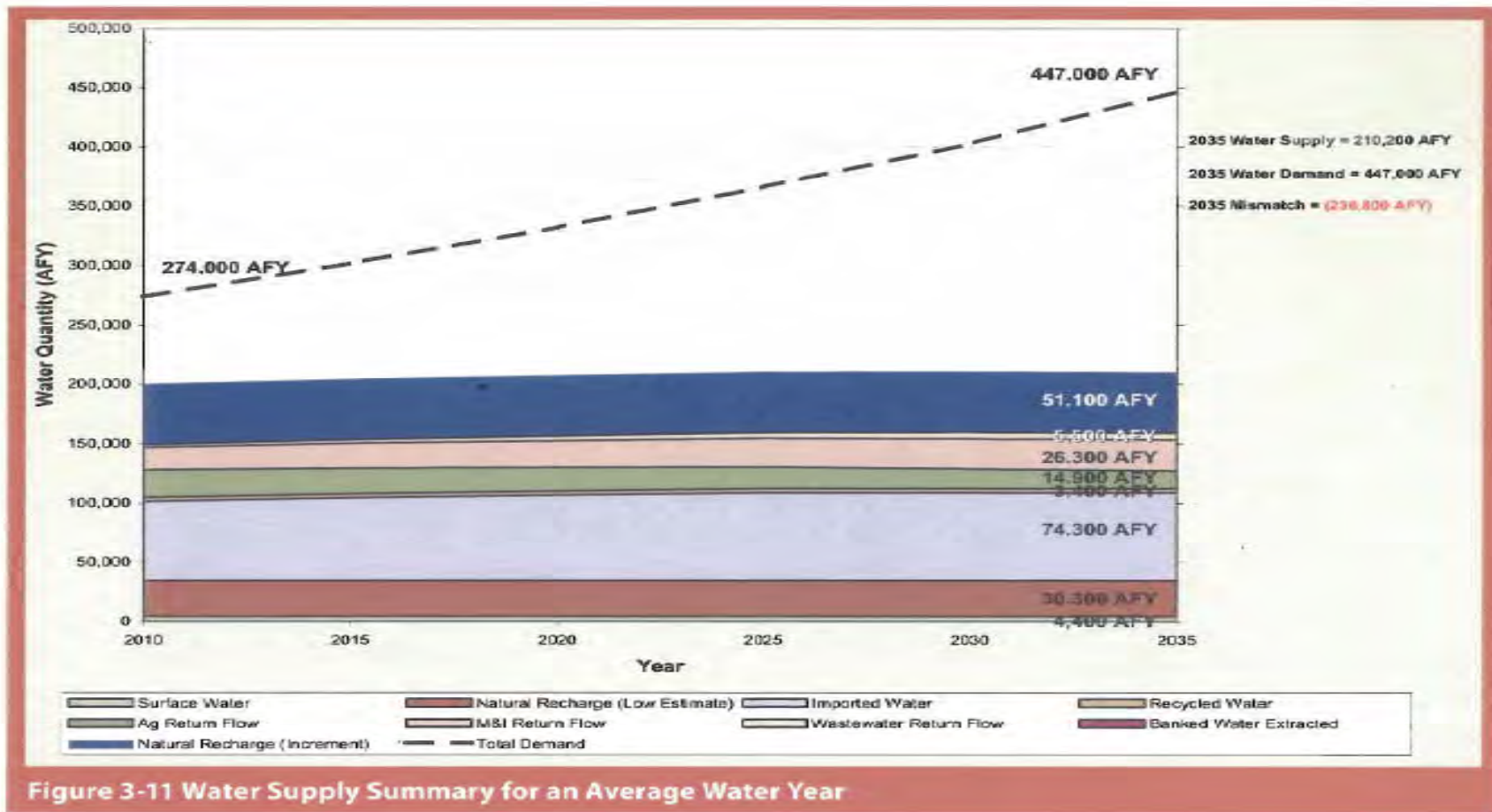
- In 1983, State Assembly Bill 797 modified the California Water Code Division 6 by creating the UWMPA. The California Water Code requires urban water suppliers within the state to prepare and adopt Urban Water Management Plans (UWMP) for submission to the Department of Water Resources (DWR). These plans, which must be filed every five years, must satisfy the requirements of the Urban Water Management Planning Act (UWMPA) of 1983. PWD has completed, adopted and filed an Urban Water Management Plan every five years since 1990.

- Integrated Regional Water Management Plan (IRWMP)

- Leaders and agencies in the Antelope Valley Region recognized the need for regional cooperation and planning. A number of organizations in the AV joined to form a Regional Water Management Group (RWMG) to work together and create an IRWM Plan. Members of the RWMG include the Antelope Valley-East Kern Water Agency (AVEK), Antelope Valley State Water Contractors Association (AVSWCA), City of Lancaster, City of Palmdale, Littlerock Creek Irrigation District, Los Angeles County Sanitation District (LACSD) Nos. 14 and 20, Los Angeles County Waterworks District No. 40 (LACWWD 40), Palmdale Water District (PWD), Quartz Hill Water District (QHWD), and Rosamond Community Services District (RCSD). The IRWMP identifies regional water resource shortfalls out to the year 2035

Future Water Demands IRWMP

Integrated Regional Water Management Plan | Antelope Valley





PWD Strategic Planning Documents

- **PWD Strategic Water Resources Plan**

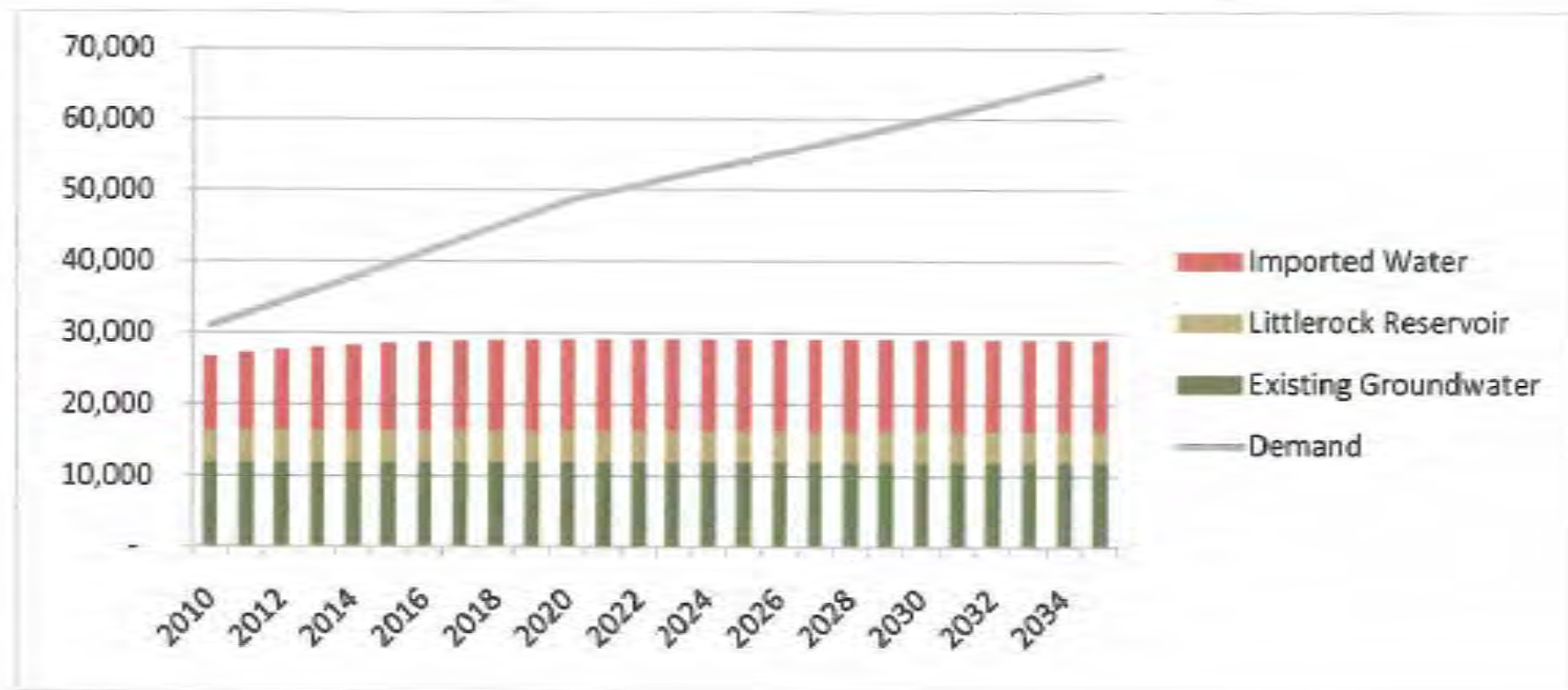
- Palmdale Water District's Strategic Water Resources Plan (SWRP) has been developed as a road map to plan for projects that best meet the District needs for near term and long term water supplies. The final Strategic Water Resources Plan incorporates various water source components and costs into one plan with a list of alternatives and priorities for water supply reliability for future growth within the District.
- The District is currently preparing responses to comments received from the City of Palmdale on our draft Programmatic Environmental Impact Report (PEIR) for the SWRP.

- **PWD Recycled Water Master Plan**

- In August of 2009 PWD completed its final draft Recycled Water Master Plan. PWD is pursuing recycled water to offset increased potable water demand and diversify the District's water supply options. Palmdale Water District's Recycled Water Master Plan defines a set of alternatives for a new distribution system to deliver recycled water from the Palmdale Reclamation Plant to some combination of District's municipal customers, agricultural customers adjacent to the District, and groundwater recharge using recycled water.
- In January of 2010 PWD prepared a draft Recycled Water Master Plan Initial Study/Mitigated Negative Declaration for CEQA compliance. This document is currently on hold pending the outcome of recent litigation.

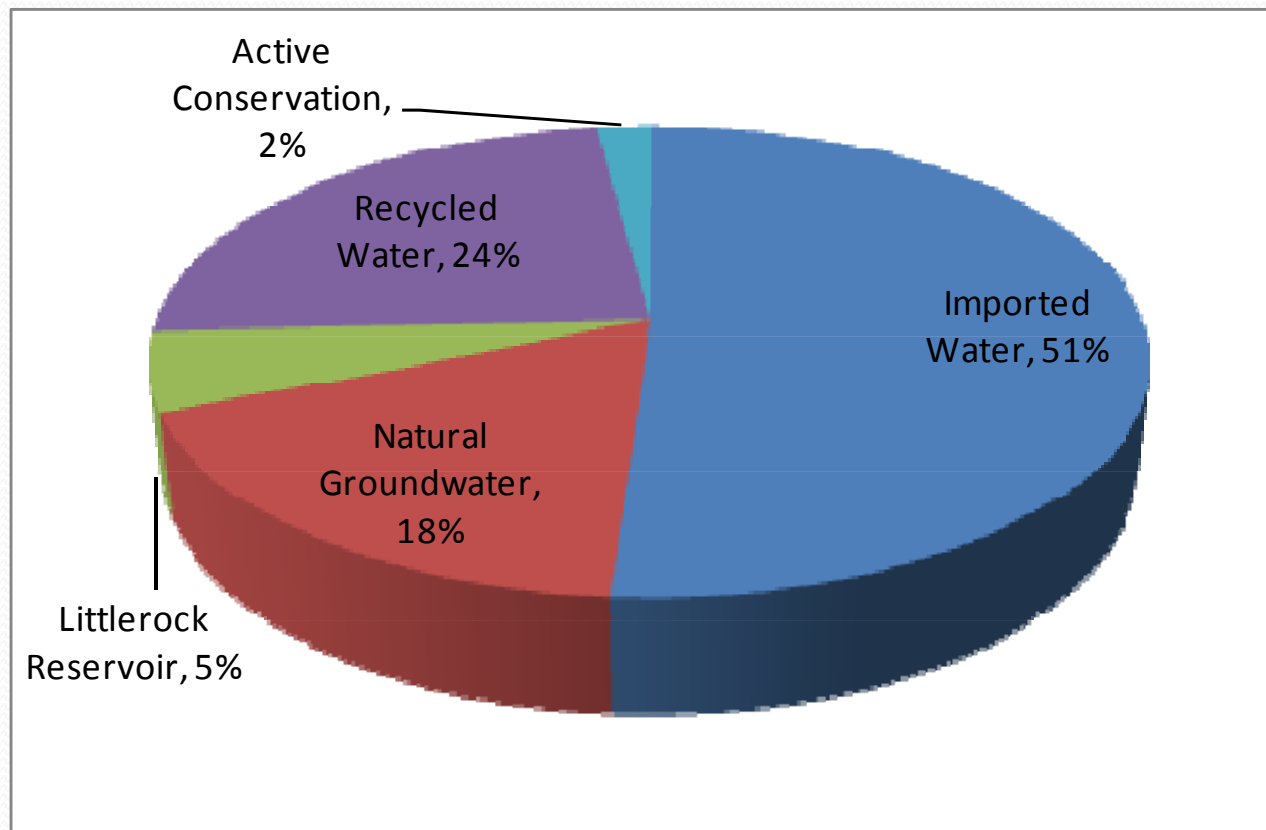
Future Water Demands PWD SWRP

Figure 2-3: Current Supplies Available to Meet Demands Under Average Conditions



Future PWD 2035 Water Supply Goal

2035 Supply: ~60,000 AFY +

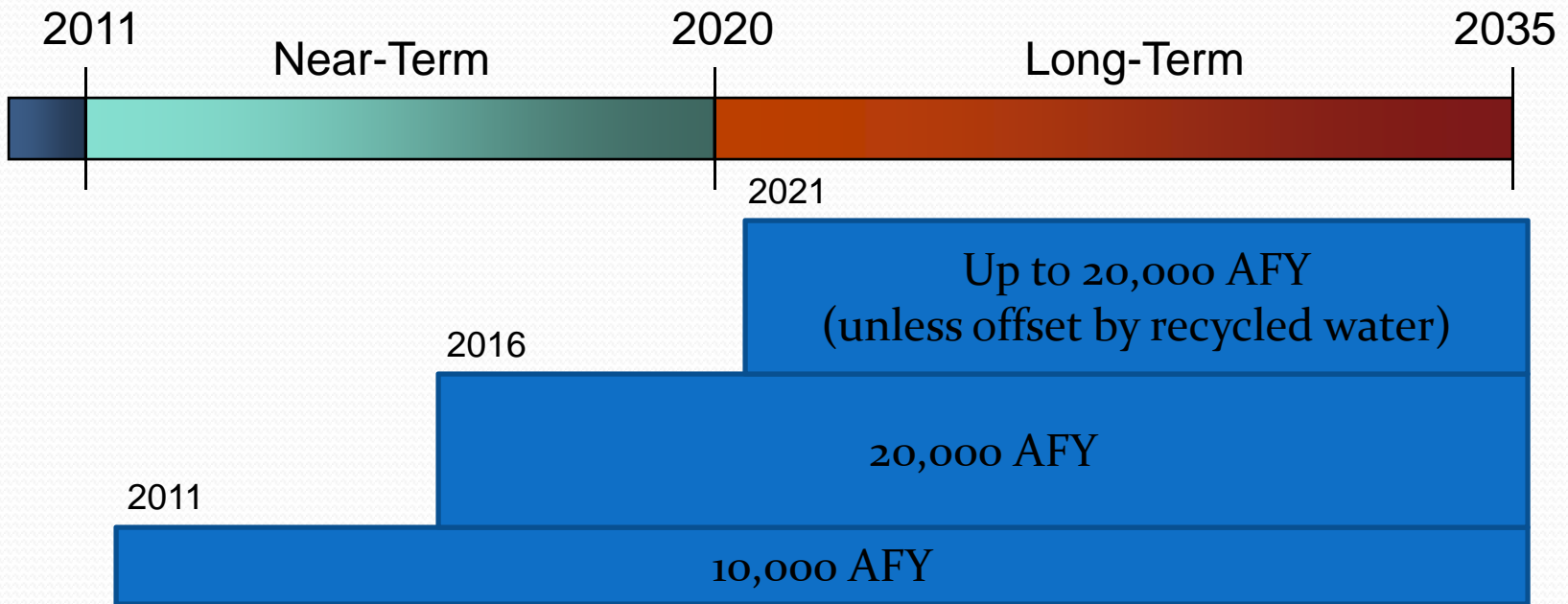




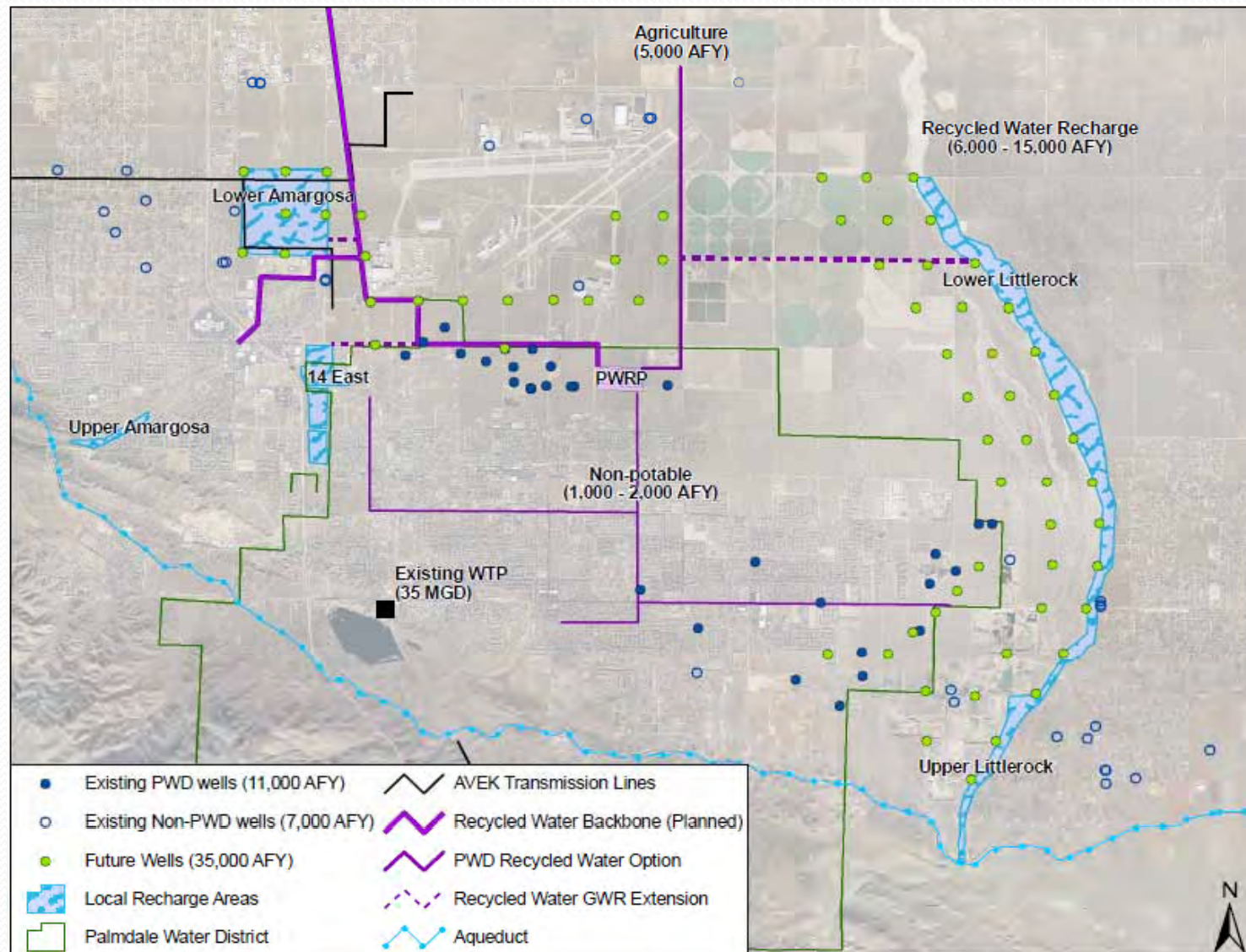
SWRP Imported Water Objectives

- Firm up existing Table A supplies so that imported water is available at least at historical average levels (recover losses in long term reliability of the SWP)
- Create and maintain options for future acquisition of imported water when available and as need arises
- Protect both existing supplies and future opportunities by being proactive and a leader as operation and management of the SWP system continues to evolve

Imported Water



How Water Will Be Delivered SWRP

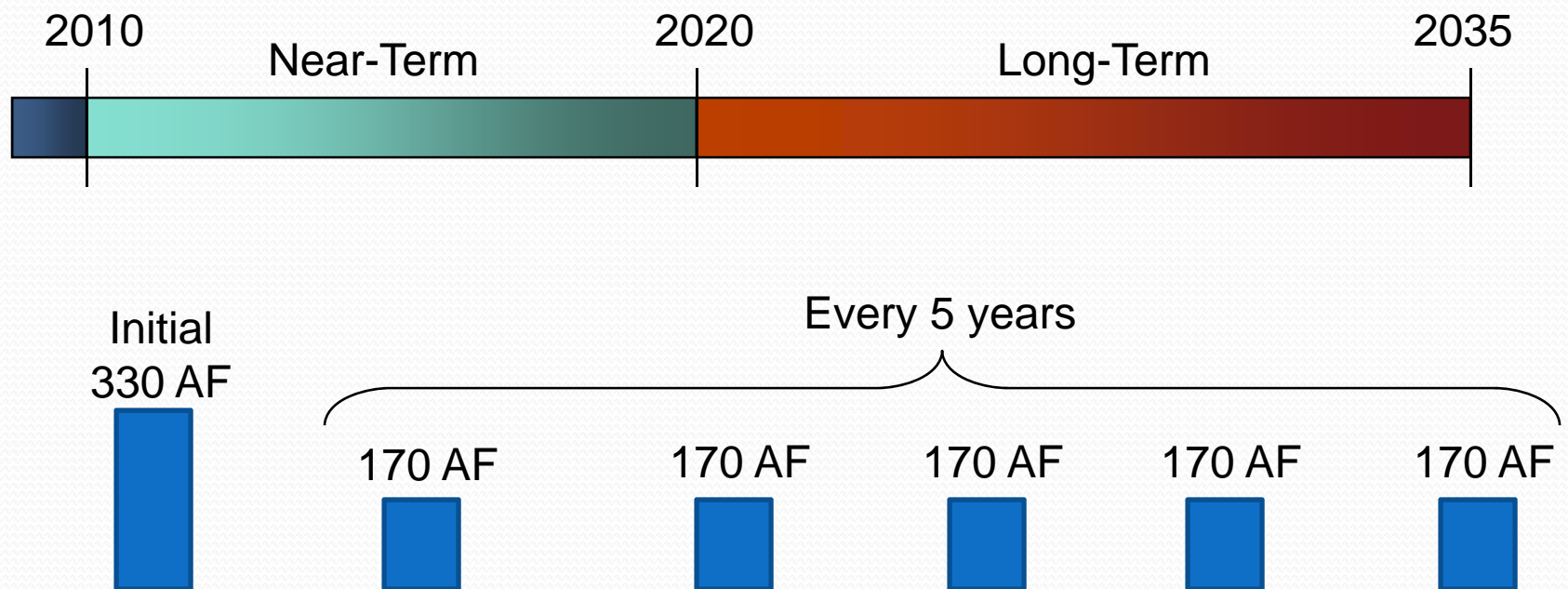




SWRP LITTLE ROCK RESERVOIR OBJECTIVES

- Create and maintain additional storage capacity for water resource and recreational benefit through sediment removal
- Maintain the quality of water in Littlerock Reservoir
- Continue to explore ways to use Littlerock Reservoir for water supply reliability, power generation, and other benefits

Littlerock Reservoir Sediment Removal



Littlerock Dam 2011





Strategic Water Resource Plan Summary

- Create local and offsite storage and recovery (Banking)
- Acquire additional imported supplies
- Maximize recycled water
- Maintain Littlerock Reservoir
- Expand conservation efforts



Current PWD Water Resource Projects

- Based on the projected demands, availability of the current supply sources under different water year types, and the addition of system losses associated with raw water conveyance and storage, Palmdale Water Districts future water supply requirements are determined to be in excess of 60,000 acre feet annual by the year 2035. The following is a partial list of current projects being undertaken to help meet this need:
 - Butte County ten year 10,00 acre feet annual lease agreement.
 - PWD is also negotiating additional permanent Table A transfers from other State Water Project contractors
 - PWD participated in the Garden Bar Reservoir Reconnaissance study (nearing completion)
 - Water exchange agreements with West Kern Water Agency, Central Coast Water Agency, and AVEK
 - PWD is currently pursuing water banking opportunities both locally and in the San Joaquin Valley
 - Pre 1914 water rights acquisitions from northern California
 - Recycled Water Master Plan
- These projects and others to be discussed in more detail in future Water Supply and Reliability meetings.



QUESTIONS ?