

DATE: July 13, 2015

AGENDA ITEM # 3

TO: Environmental Commission

FROM: J. Logan, Staff Liaison

SUBJECT: Water Conservation

RECOMMENDATION:

Review and discuss water consumption and conservation efforts

BACKGROUND

The Environmental Commission appointed a Subcommittee of Commissioners Eyre, Weiden and Halkola to determine methods for achieving the State's goals for reductions in water consumption. To this effort, the Subcommittee continues to: 1) review and report on water conservation efforts within Santa Clara County; 2) explore model water conservation ordinances and enforcement procedures; 3) gather water consumption data from the City of Los Altos water retailer, Cal Water; 4) formulate water consumption data to display annual and monthly usage in the Climate Action Plan Dashboard; 5) provide education and outreach efforts to residents and commercial establishments in Los Altos; 6) utilize resources from the Santa Clara County Valley Water District; 7) analyze the provisions in the current City of Los Altos Water Conservation Resolution to determine the effectiveness of water reduction efforts.

At the Environmental Commission/Council Joint Meeting on March 17, 2015, Council advised the Commission that water conservation for the City is a major priority. Council encouraged the Commission to continue its Work Plan goal and projects on water conservation and to advise Council on the actions needed to attain the State's water reduction goals.

The Subcommittee efforts continue to provide reports to the Commission that result in discussions and lead to the formulation of recommendations to Council.

In September 2014, the Subcommittee began to explore opportunities for Cal Water Service, Purissima Hills Water District, the Town of Los Altos Hills and the City of Los Altos Environmental Commission to work together on the topic of Water Innovation for a public education and outreach effort to the joint communities. The Water Innovation seminar was held on March 12, 2015. The Subcommittee gave its report about the seminar at the April 13, 2015 Environmental Commission meeting.

The Subcommittee and Staff Liaison continue to work with Cal Water and the Santa Clara Valley Water District on local efforts, and data collection and initiatives for water usage reduction and conservation. Rachael Gibson, Office of Government Relations, Santa Clara Valley Water District,

gave a presentation on water conservation efforts at the April 13, 2015 Environmental Commission meeting.

In addition, City staff attended a webinars hosted by the Office of the Governor regarding the Governor's Executive Order for water conservation and new goals set by the State for 25% reduction in water consumption. The Los Altos Water District goal for water reduction is 32%.

DISCUSSION

Staff met with Cal Water Service (CWS) on April 22, 2015 and received a report about the drought, water-use restrictions and conservation efforts that will be implemented in the Los Altos Water District effective June 1, 2015. Staff then meet with the Water Conservation Subcommittee on April 30, 2015 and provided a briefing on these measures.

CWS convened a community meeting on May 11, 2015 at 6 pm at Covington School and presented drought, water use restrictions and conservation plans for the community. The Environmental Commission meeting convened at approximately 8:00 pm after the conclusion of the CWS community meeting.

At the May 11, 2015 Environmental Commission meeting, Public Works Director Susanna Chan presented a report and requested comments on the proposed City of Los Altos Level Three water conservation measures and implementation strategy.

At the June 9, 2015 Council meeting, Council adopted Resolution No. 2015-15 for Water Conservation Measures. At the June 23, 2015 Council meeting, Council approved the City of Los Altos agency water conservation efforts and approved Level 3 water reduction measures and prioritization

Effective June 1, 2015, CWS commenced implementation of Rule 14.1 reduction mandates and monthly water budget allocations for individual water users along with enforcement measures for meeting a 32% reduction in water usage for residents, businesses and for City municipal operations.

The Water Conservation Subcommittee and Staff will provide comments and updates.

Attachments:

- A. Santa Clara Valley Water District Drought 2015 Monthly Status Report; June 2015 – selected pages
- B. CA Water Resources Control Board – Los Altos Suburban District Production
- C. Drought Report Cards for California's Urban Water Districts

Section 2. Retailers' Water Use Reductions and Savings ATTACHMENT A

This section contains detailed water use data from 2013 and 2015, summarizes cumulative water use saving percent, and illustrates cumulative and monthly trends in water use and savings at the water retailer level. [Please see Section 5, Data Collection Methodology for more information]

TABLE 4: 2015 RETAILER CONSERVATION ACTIONS AND SAVINGS SUMMARY

Water Retailer	Call for Savings	Monthly Use (AF)	Monthly Savings April 2015	Monthly Savings May 2015	Cumulative Savings Jan to May 2015
San Jose Water Co.	30%	42,259	25%	36%	18%
Santa Clara (City)	30%	7,118	11%	26%	11%
Sunnyvale	30%	6,403	27%	38%	20%
San Jose Municipal	30%	6,272	24%	39%	19%
California Water Service	32%	4,055	26%	40%	23%
Palo Alto *	24%	3,973	25%	43%	24%
Mountain View	16%	3,589	27%	38%	22%
Great Oaks	30%	3,567	25%	38%	20%
Milpitas	30%	3,489	17%	31%	14%
Gilroy	30%	2,796	24%	15%	13%
Morgan Hill	30%	2,186	39%	37%	25%
Purissima Hills Water	25%	**	40%	**	**
Stanford	***	**	29%	**	**
Total		85,707	24%	35%	18%

* Estimated for May 2015

**Not available as of June 17, 2015

*** No percent reduction targets for domestic use

Retailers' Water Use Reductions and Savings

TABLE 5: 2015 RETAILER CUMULATIVE AND MONTHLY SAVINGS SUMMARY

Cumulative Water Retailer Savings	Jan to Jan	Jan to Feb	Jan to Mar	Jan to April	Jan to May	Jan to June	Jan to July
San Jose Water Company	-3%	1%	3%	10%	18%		
Santa Clara (City of)	2%	5%	4%	6%	11%		
Sunnyvale	-6%	7%	6%	12%	20%		
San Jose Municipal Water	-8%	2%	4%	11%	19%		
California Water Service	8%	11%	10%	15%	23%		
Palo Alto	10%	15%	12%	16%	24%		
Mountain View	0%	13%	10%	15%	22%		
Great Oaks	0%	5%	7%	13%	20%		
Milpitas	1%	6%	4%	8%	14%		
Gilroy	-5%	0%	5%	12%	13%		
Morgan Hill	-8%	-2%	6%	19%	25%		
Purissima Hills Water*	-4%	14%	7%	21%	*		
Stanford*	-3%	6%	7%	13%	*		
Cumulative Savings 2015	-2%	4%	5%	11%	18%		
<i>Cumulative Savings 2014**</i>	<i>N/A</i>	<i>9%</i>	<i>11%</i>	<i>13%</i>	<i>12%</i>	<i>11%</i>	<i>11%</i>
Month to Month Water Retailer Savings	Jan to Jan	Feb to Feb	Mar to Mar	April to April	May to May	June to June	July to July
San Jose Water Company	-3%	5%	7%	25%	36%		
Santa Clara (City of)	2%	7%	3%	11%	26%		
Sunnyvale	-6%	18%	4%	27%	38%		
San Jose Municipal Water	-8%	11%	7%	24%	39%		
California Water Service	8%	15%	8%	26%	40%		
Palo Alto	10%	19%	6%	25%	43%		
Mountain View	0%	24%	3%	27%	38%		
Great Oaks	0%	10%	10%	25%	38%		
Milpitas	1%	11%	-1%	17%	31%		
Gilroy	-5%	5%	13%	24%	15%		
Morgan Hill	-8%	3%	17%	39%	37%		
Purissima Hills Water *	-4%	25%	-3%	40%	*		
Stanford *	-4%	13%	8%	29%	*		
Combined Month to Month 2015	-2%	9%	7%	24%	35%		
<i>Combined Month to Month 2014**</i>	<i>N/A</i>	<i>9%</i>	<i>12%</i>	<i>16%</i>	<i>10%</i>	<i>8%</i>	<i>11%</i>

* NA not available as of 6/18/2015

** January 2014 was not included in analysis as there was no call for savings

California Water Service Company

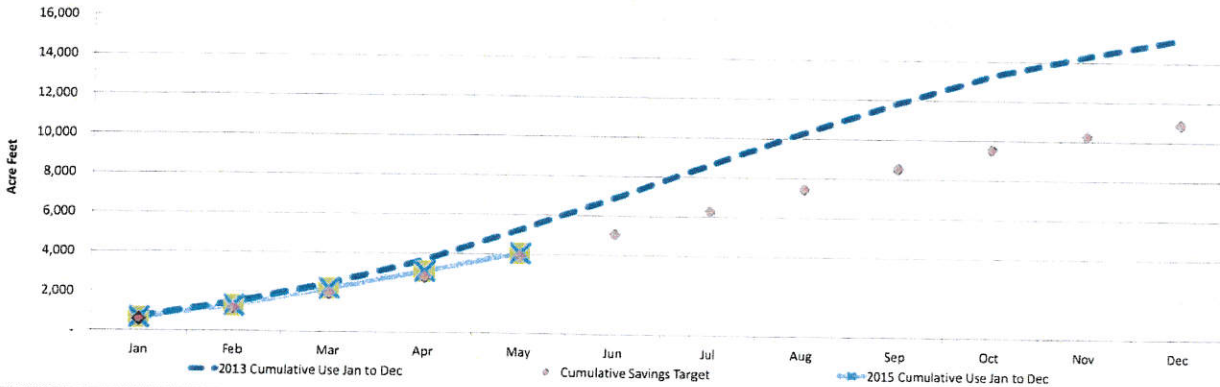
2013 and 2015 Water Use Compared to Target

2013	Groundwater	Treated Water	SPPLC	Surface	2013 Monthly Use
Jan	215.0	510.0	-	-	725.0
Feb	254.0	477.0	-	-	731.0
Mar	446.0	544.0	-	-	990.0
Apr	439.0	786.0	-	-	1,225.0
May	672.0	906.0	-	-	1,578.0
Jun	709.0	930.0	-	-	1,639.0
Jul	690.0	1,049.0	-	-	1,739.0
Aug	437.0	1,241.0	-	-	1,678.0
Sep	321.0	1,221.0	-	-	1,542.0
Oct	363.0	1,068.0	-	-	1,431.0
Nov	183.0	844.0	-	-	1,027.0
Dec	262.0	626.0	-	-	888.0
Jan to Current Month	2,026.0	3,223.0	-	-	5,249.0
January to December Total	4,991.0	10,202.0	-	-	15,193.0

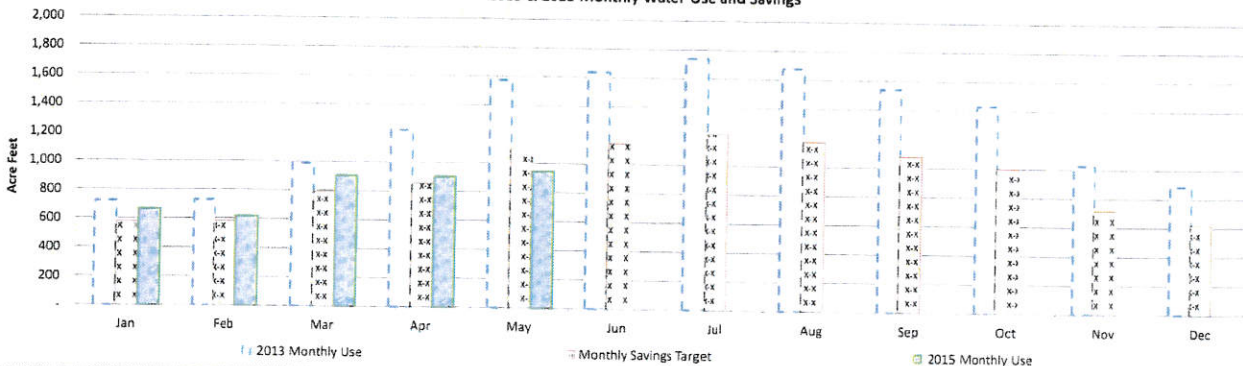
2015	Groundwater	Treated Water	SPPLC	Surface	2015 Monthly Use
Jan	491.0	178.0	-	-	669.0
Feb	447.0	175.0	-	-	622.0
Mar	658.0	252.0	-	-	910.0
Apr	479.0	427.0	-	-	906.0
May	219.0	729.0	-	-	948.0
Jun	-	-	-	-	-
Jul	-	-	-	-	-
Aug	-	-	-	-	-
Sep	-	-	-	-	-
Oct	-	-	-	-	-
Nov	-	-	-	-	-
Dec	-	-	-	-	-
Jan to Current Month	2,294.0	1,761.0	-	-	4,055.0
% Savings by Source of Supply	-13%	45%			23%

Cumulative % Savings Jan to December
(+) = savings
8%
11%
10%
15%
23%
-
-
-
-
-
-
-

Cal Water
2013 & 2015 Cumulative Water Use and Savings



Cal Water
2013 & 2015 Monthly Water Use and Savings



Notes

Current monthly water use data is preliminary and subject to change.
 Percent savings are shown in positive values where savings have been made and negative percent values where water use is higher than the base year period (2013)
 January to March 2015 savings targets at 20% reductions compared to the same period in 2013, and the remaining months are at the March 24, 2015 call for 30% savings.
 Cumulative % Savings shows the target savings for all months combined at that period in time.
 Recycled water not included in monthly analysis and will be analyzed separately. It is not included in the water savings target.
 N/A = Not Applicable
 - - - Not Available



Look up drought report cards for California's urban water districts

By THOMAS SUH LAUDER (MAILTO:THOMAS.LAUDER@LATIMES.COM)

JUNE 25, 2015 - UPDATED JULY 1, 2015

To address California's multiyear drought, Gov. Jerry Brown ordered a 25% cut statewide in urban water use by 2016. Individual urban water districts, depending on their level of water use, have been ordered to reduce water consumption between 4% and 36%. Districts with a history of heavy water use must cut more, and those that have used less will be required to reduce less. The State Water Resources Control Board will measure each district's progress on a monthly basis and cumulatively over time. The next monthly update is due in late July.

STATEWIDE GOAL

25%

LESS TOTAL WATER
USE THAN IN 2013

URBAN WATER DISTRICT:

California Water Service Company Los Altos/Suburban

Not the correct district? Try a nearby district.



Leaflet (<http://leafletjs.com>)

Providing water to a population of **68,116**, the California Water Service Company Los Altos/Suburban is part of the San Francisco Bay hydrologic region

REDUCTION
GOAL

▼ 32%

(http://www.conservation.ca.gov/dlrp/watershedportal/InformationResources/Documents/WS_huc10_regions8_26_10.pdf)

Based on residential water consumption in summer 2014 (<http://www.latimes.com/visuals/graphics/la-me-g->

drought-enforcement-20150407-htmlstory.html), the state has ordered this district to cut **32%** of its total water use during the months of June through February compared with 2013. In May, lawn watering was allowed **seven days a week** and the district issued **9 warnings** and assessed **no penalties**.

How did this district perform in May?

The California Water Service Company Los Altos/Suburban used **309.0 million gallons** in May, the latest monthly data available. May total water use for the district **decreased 40%** compared with May 2013. The state will evaluate compliance monthly and on a rolling cumulative basis starting with June data.

CHANGE FROM
MAY 2013

▼ **40%**

Monthly total water use

In millions of gallons

2013 (used for comparison)

2015

514

399

323

296

295

309

238

203

FEB

-15%

MAR

-8%

APR

-26%

MAY

-40%

How much of this is residential use?

State officials will judge compliance with conservation orders based on a district's overall total water consumption, which, in addition to residential use, includes commercial and industrial consumption as well as water lost to leaks and firefighting. For the California Water Service Company Los Altos/Suburban, residential use made up **76% of total water consumption** in May.

RESIDENTIAL USE

76%

How does the state measure residential use?

According to the latest data from the state, each resident of the California Water Service Company Los Altos/Suburban used, on average, **111 gallons of water a day**, a measurement referred to as R-GPCD (residential gallons per capita daily).

GALLONS

111

Residential gallons per person per day

RESIDENTIAL PER

163

138

97

64

72

81

104

109

111

SEP

OCT

NOV

DEC

JAN

FEB

MAR

APR

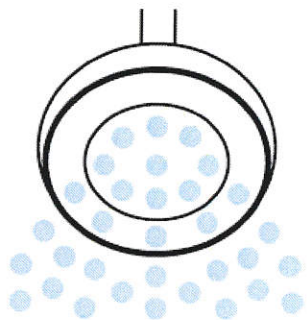
MAY

How many gallons are used for typical water uses?



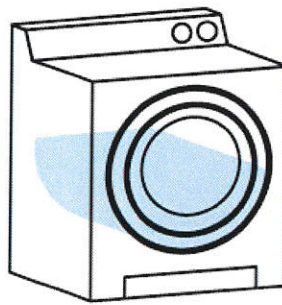
1.3

One toilet flush (post-1993 high-efficiency toilet)



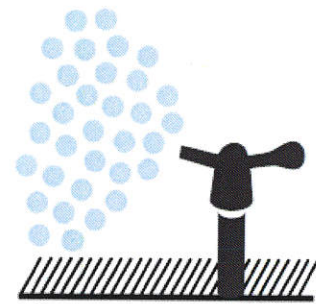
1.7

One minute of shower (post-1993 standard showerhead)



14.4

One laundry load (post-2006 high-efficiency washer)



620

Weekly summer minimum for 1,000 square feet of lawn

How does residential use compare with the state average?

When it comes to residential gallons per capita daily, the California Water Service Company Los Altos/Suburban is above the state average for May.

California Water Service Company Los Altos/Suburban

California state average: **87.5**

111

How does this district compare to nearby districts?

State water officials say that many variables—including rainfall, temperature, lot size and population growth—should be considered when comparing residential water consumption. The State Water Resources Control Board used the residential gallons per capita daily figures as the primary measure to establish conservation targets each district must meet.

To view another district's report card, click on the district name.

City of Mountain View (?id=1671)

63

City of Sunnyvale (?id=2425)

54

City of Palo Alto (?id=1851)

76

City of Santa Clara (?id=2210)

69

City of East Palo Alto (?id=9989)

45

City of Menlo Park (?id=1587)

71

... or to notable districts in the state?

For May, the water district with the lowest residential daily water use was the Westborough Water District, while Myoma Dunes Mutual Water Company recorded the highest. Residential water consumption for the largest cities in the state are also shown below.

LOWEST: Westborough Water District (?id=2691)

39

HIGHEST: Myoma Dunes Mutual Water Company (?id=1697)

348

City of Sacramento (?id=2130)

100

Los Angeles Department of Water and Power (?id=1473)

72

City of San Diego (?id=2160)

56

San Francisco Public Utilities Commission (?id=2164)

41

Look up a water district in California

Search by address, ZIP code or city/state

📍 Find a district based on my location

Look up one of the biggest districts: [Los Angeles \(?id=1473\)](#) | [San Diego \(?id=2160\)](#) | [San Francisco \(?id=2164\)](#) | [Sacramento \(?id=2130\)](#)

Complete drought coverage (<http://www.latimes.com/local/la-me-chronicling-californias-drought-story-gallery-20140925-storygallery.html>) from *The Times*.

Read more about water conservation tips (<http://www.latimes.com/science/sciencenow/la-sci-sn-start-conserving-water-now-20150415-story.html>).

Calculate your water consumption here (<http://www.wecalc.org/>), here (<http://www.home-water-works.org/calculator>) and here (<http://www.h2ouse.org/tour/index.cfm>).

Graphics reporting by Matt Stevens (<http://www.latimes.com/la-bio-matt-stevens-staff.html>). **Twitter:** [@bymattstevens](https://twitter.com/ByMattStevens) (<https://twitter.com/ByMattStevens>)

Sources: State Water Resources Control Board (<http://www.swrcb.ca.gov/>), Department of Water Resources (<http://www.water.ca.gov/>), Assn. of California Water Agencies (<http://www.acwa.com/>), Pacific Institute (<http://www.wecalc.org/>), UC Davis and Times reporting.

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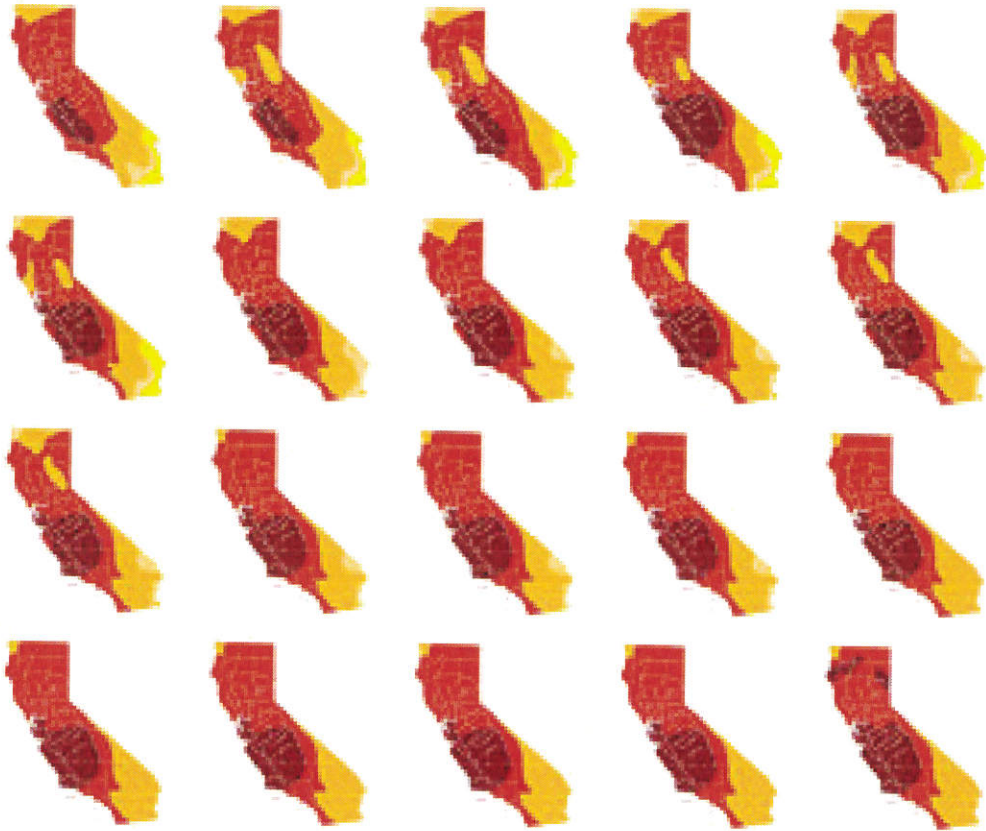
📄 More graphics from the Los Angeles Times: (<http://www.latimes.com/visuals/graphics/>)



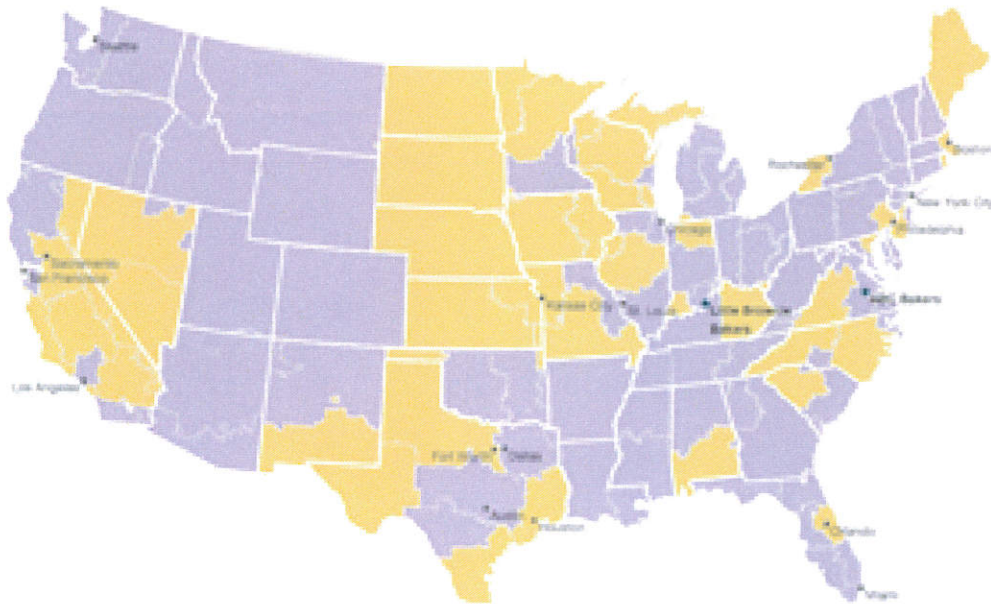
How what you eat demands more water than you think it does (<http://graphics.latimes.com/food-water-footprint/>)



Run the L.A. Marathon without ever breaking a sweat (<http://graphics.latimes.com/la-marathon-2015/>)



California's worsening drought (<http://www.latimes.com/science/la-me-g-california-drought-map-htmlstory.html>)



Caramel deLites



Samoa



Peanut Butter Patties



Tagalongs

6 Girl Scout Cookies you thought you were getting but aren't (<http://graphics.latimes.com/girl-scout-cookies/>)