LAFCO
Local Agency Formation Commission
for the County of Los Angeles

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www.lalafco.org

LOCAL AGENCY FORMATION COMMISSION
MEETING AGENDA

Wednesday, March 13, 2019
9:00 a.m.

Room 381B
Kenneth Hahn Hall of Administration
500 West Temple Street, Los Angeles 90012

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Entrance to the Commission Meetings requires entry through security screening at any of the public entrances to the KHHOA:

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- 225 N. Hill Street (first floor of KHHOA)
- 222 N. Grand Avenue (fourth floor of KHHOA)
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1. **CALL MEETING TO ORDER**
2. **PLEDGE OF ALLEGIANCE WILL BE LED BY CHAIR GLADBACH**
3. **DISCLOSURE OF CAMPAIGN CONTRIBUTION(S)**
4. **SWEARING-IN OF SPEAKER(S)**

5. INFORMATION ITEM(S) – GOVERNMENT CODE §56857 NOTICE

None.

6. CONSENT ITEM(S)

All matters are approved by one motion unless held by a Commissioner or member(s) of the public for discussion or separate action.

a. Approve Minutes of February 13, 2019.
b. Approve Operating Account Check Register for the month of February 2019.
c. Receive and file update on pending proposals.

7. PUBLIC HEARING(S)

None.

8. PROTEST HEARING(S)

None.

9. OTHER ITEMS

a. Presentation by Gregory Pierce (Associate Director of Research, Luskin Center for Innovation and Adjunct Assistant Professor, Department of Urban Planning, UCLA) concerning his work analyzing the performance of retail water service providers in Los Angeles County.
b. Request for Proposals (RFPs) for:
    i. Municipal Service Review of the Santa Clarita Valley Water Agency.
    ii. Municipal Service Review of the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village.
    iii. Municipal Service Review of the Cities of La Mirada and Whittier.
c. FY 2018-19 Mid-Year Budget Status Report (continued from 2/13/2019 Meeting).
d. Alternate Public Member (continued from 2/13/2019 Meeting).

10. LEGISLATION

a. Legislative Update (continued from 2/13/2019 Meeting).

11. MISCELLANEOUS CORRESPONDENCE RECEIVED

None.

12. COMMISSIONERS' REPORT

Commissioners' questions for staff, announcements of upcoming events and opportunity for Commissioners to briefly report on their LAFCO-related activities since last meeting.

13. EXECUTIVE OFFICER'S REPORT

Executive Officer's announcement of upcoming events and brief report on activities of the Executive Officer since the last meeting.

14. PUBLIC COMMENT

This is the opportunity for members of the public to address the Commission on items not on the posted agenda, provided that the subject matter is within the jurisdiction of the Commission. Speakers are reminded of the three-minute time limitation.

15. FUTURE MEETINGS

April 10, 2019
May 8, 2019
June 12, 2019
July 10, 2019

16. FUTURE AGENDA ITEMS

Items not on the posted agenda which, if requested, will be referred to staff or placed on a future agenda for discussion and action by the Commission.

17. ADJOURNMENT

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DRAFT

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REGULAR MEETING

MINUTES OF THE LOCAL AGENCY FORMATION COMMISSION

FOR THE COUNTY OF LOS ANGELES

February 13, 2019

Present:

Jerry Gladbach, Chair

Kathryn Barger
Richard Close
Donald Dear
Janice Hahn
Gerard McCallum
John Mirisch
Greig Smith

Lori Brogin-Falley, Alternate
Judith Mitchell, Alternate
Joe Ruzicka, Alternate

Paul Novak, Executive Officer
Carole Suzuki, Legal Counsel

Absent:

Margaret Finlay

Sheila Kuehl, Alternate
David Ryu, Alternate

Vacant:

Alternate General Public Member

1 CALL MEETING TO ORDER

The meeting was called to order at 9:00 a.m. in Room 381-B of the County Hall of Administration by Chair Jerry Gladbach.

2 PLEDGE OF ALLEGIANCE

The Pledge of Allegiance was led by Chair Jerry Gladbach.

ANNOUNCEMENTS

Chair Gladbach announced that Los Angeles City Council President Herb Wesson appointed Greig Smith as the Voting Member representing the City of Los Angeles.

Chair Gladbach requested that Agenda Item 7.a. be taken out of order. The Commission had no objections.

3 DISCLOSURE OF CAMPAIGN CONTRIBUTION(S)

The Executive Officer (EO) read an announcement, asking that persons who made a campaign contribution of more than $250 to any member of the Commission during the past twelve (12) months to rise and state for the record the Commissioner to whom such campaign contributions were made and the item of their involvement (None).

The EO read an announcement, asking if any Commissioner had received a campaign contribution that would require disclosure and recusal from any item on today's agenda (None).

4 SWEARING-IN OF SPEAKER(S)

The EO swore-in over ten (10) members of the audience who planned to testify.

The Commission moved to Agenda Item 7.a.

7 PUBLIC HEARING(S)

The following item was called for consideration:

a. Dissolution No. 2018-09 of the Sativa County Water District.

The EO indicated that a letter was received by the State Water Resources Control Board (dated February 11, 2019) after the posting of the Agenda which was e-mailed to the Commissioners and hard copies were provided at today's meeting. The letter was in support of the dissolution of the Sativa County Water District and appointment of the County of Los Angeles as the successor agency.

The EO noted that there was a numbering error in the resolution (Exhibit "J"). A revised

resolution was provided to each of the Commissioners.

The EO summarized the staff report on Dissolution No. 2018-09 of the Sativa County Water District ("District" or "Sativa").

The public hearing was opened to receive testimony.

Dan Lafferty (Deputy Director, Los Angeles County Department of Public Works) came before the Commission. Mr. Lafferty stated that the Los Angeles County Department of Public Works (LACDPW) supported the staff recommendation and conditions within the resolution to dissolve the Sativa County Water District. Mr. Lafferty provided an overview of the District's progress. He indicated that LACDPW's goals are to rebuild the trust of the Sativa ratepayers through transparency, move the District into a better position financially, and address the brown water issues. He stated that the LACDPW terminated contracts and agreements that where not in the best interest of the District. The Los Angeles County Board of Supervisors approved a $1.4 million loan (line of credit) to Sativa, which has been managed by LACDPW as Administrator. A portion of the loan has helped balance the District's operating budget and pay outstanding debt which were caused by the lack of bookkeeping and lack of financial controls by Sativa's prior management. The LACDPW is actively seeking grant loans from the State Water Resources Control Board (SWRCB). Mr. Lafferty indicated that water wells were not properly maintained, and that sediment is not the primarily cause of the brown water. He indicated that the LACDPW has created an interconnection with a neighboring system in order to take each water well off-line, one-by-one, to inspect each well, and identify the cause of the problems; and the necessary corrective actions.

Commissioner Mirisch asked if the lack of bookkeeping and lack of financial controls is criminal. Mr. Lafferty indicated that all questionable items have been flagged and documented. Commissioner Mirisch suggested that the Los Angeles County District Attorney's Office be notified regarding the possibility of criminal intent by Sativa's prior management.

Commissioner Hahn thanked the LACDPW for agreeing to "step in" as the State administrator and thanked the County of Los Angeles for providing the $1.4 million loan. Commissioner Hahn asked when will the LACDPW release the Request for Proposal (RFP) for a new service provider.

Russ Bryden (Principal Engineer, LACDPW) came before the Commission. Mr. Bryden indicated that the LACDPW is currently working to create an RFP and that it should be released to bidders in July of 2019.

Commissioner Hahn asked if Condition 9.s. in the resolution is for Commissioners to evaluate the RFP or to evaluate the bids. Carole Suzuki (Legal Counsel) stated that the condition would serve to have LAFCO participate in evaluation of the bids.

Commissioner Hahn asked if the Commission can be involved with reviewing what is included in the RFP before it goes out to the bidders. Mr. Lafferty indicated that the LACDPW would be

open to receive input from the Commission. The EO stated that there are four keys points within the resolution as Condition 9.u. that must be addressed in the RFP. Commissioner Hahn requested that a future item be agenized for the Commission to review the Request for Proposal before it goes out to the bidders.

Commissioner Hahn asked if it is the strategy of the LACDPW to get the District in the "best shape" possible before the new service provider assumes responsibility. Mr. Lafferty stated that the goal is for the LACDPW to address the brown water issues before a new provider assumes water service and have the system as attractive as possible.

Commissioner Barger asked what the reasoning is for utilizing an RFP instead of opting for a Request for Information (RFI). Carole Suzuki (Legal Counsel) indicated that an RFI is used to solicit information which is then used to formulate the RFP. The RFP is the solicitation relied on to get bids and proposals from the future service provider. Ms. Suzuki indicated that an RFP would be more appropriate for this situation unless the County determines otherwise.

Commissioner Mitchell asked how the system will be upgraded without imposing financial burden on the ratepayers. Mr. Lafferty stated that the SWRCB is interested in providing grants funding opportunities to fix the various problems with the water system, such as failure to meet fire flow and brown water issues.

Commissioner Hahn asked if no rate increases can be stipulated within the RFP. Mr. Lafferty indicated the LACDPW had discussions with the California Public Utilities Commission (CPUC). There are limitations to what the County could require in the RFP process and the CPUC has jurisdiction over rate setting and increases.

Commissioner Mitchell suggested that the Commission request special legislation to consider no rate increases (assuming the new service provider may seek approval of rate increases from the CPUC). The EO indicated that the Commission can draft letters to the offices of Assembly Speaker Rendon and Assemblyman Gipson, respectively, to request special legislation addressing no rate increases from the CPUC. Carole Suzuki (Legal Counsel) stated that, potentially, the LACDPW could consider whether the RFP can include the rates as an evaluated category (proposers are to project anticipated rates according to Condition 9.u. of the resolution).

Commissioner Mirisch asked if the LACDPW can have franchising agreements with a private utility company as a subcontractor to operate the water system but remain under the control and leadership of the LACDPW. Mr. Lafferty indicated that is a potential approach. Carole Suzuki (Legal Counsel) indicated that such a hybrid approach (a public agency subcontracting with a public utility company regulated under the CPUC) would require further legal review. The EO indicated that the Commission's authority, when an agency is dissolved, is that it can designate a successor agency which is a public agency. The EO indicated that Commissioner Mirisch's question can be referred to the County, as this will be a County contract.

Mr. Lafferty indicated that if the County were to remain in control of the water system, and subcontract to a public utility, all of the expenses incurred by the County and the public utility

would be passed on to the ratepayers of the District. He stated that one benefit of having a private entity is that the costs and charges that are incurred can be spread over a larger customer base.

Commissioner McCallum indicated that he believed the Commission and the District's customers were continuously misled by District officials.

Eddie Lamont (resident of the District and a previous Board member of Sativa) came before the Commission. Ms. Lamont stated that she was concerned that water rates would increase if a private water company gained control of the system.

Tony Hicks (resident of the District and a previous Board member of Sativa) came before the Commission. Mr. Hicks indicated that he is concerned about the ratepayers of the District. It is a low-income area and fears that water rates will increase if a private water purveyor takes over the system. He indicated that the District should remain as a public agency, as much as possible.

Mark Ravis (attorney) came before the Commission. Mr. Ravis indicated that he contacted the Los Angeles County District Attorney's office to follow-up with possible criminal charges against District representatives and that residents want to submit impact statements; he stated that the District Attorney representative he spoke with did not seem to know anything about the allegations against the Sativa County Water District.

The EO indicated that a letter was mailed to the Los Angeles County District Attorney's Office (dated July 26, 2018) which noted public testimony regarding possible criminal and civil violations at Sativa.

Commissioner Hahn asked if there is a conflict of interest with the Los Angeles County Department of Public Works creating the RFP, and the LACDPW responding to the RFP as a bidder. The EO indicated that the LACDPW could look further into this matter.

There being no further testimony, the public hearing was closed.

The Commission took the following actions:

- Adopted the Resolution Making Determinations, including the California Environment Quality Act determinations, Approving and Ordering Dissolution No. 2018-09 of the Sativa County Water District; Resolution No. 2019-02RMD; and

- Directed the Executive Officer to draft letters, signed by Chair Gladbach, to Assembly Speaker Rendon and Assemblyman Gipson, respectively, to request special legislation addressing no rate increases granted from the California Public Utilities Commission.

MOTION: Hahn SECOND: Mirisch APPROVED: 9-0-0
AYES: Barger, Close, Dear, Hahn, McCallum, Mirisch, Mitchell (Alt. for Finlay), Smith, Gladbach
NOES: None.

ABSTAIN: None.
ABSENT: Finlay

5 INFORMATION ITEM(S) – GOVERNMENT CODE §§ 56751 & 56857 NOTICE

a. Annexation No. 2018-11 to the Los Angeles County Waterworks District No. 37, Acton.

The Commission took the following action:

- Received and Filed.

MOTION: Dear SECOND: McCallum APPROVED: 9-0-0
AYES: Barger, Close, Dear, Hahn, McCallum, Mirisch, Mitchell (Alt. for Finlay), Smith, Gladbach
NOES: None.
ABSTAIN: None.
ABSENT: Finlay

6 CONSENT ITEM(S)

The Commission held Agenda Item 6.d. in order to receive public testimony (see page 7).

The Commission took the following actions under Consent Items:

a. Approved Minutes of December 12, 2018.

b. Approved Operating Account Check Register for the months of December 2018 and January 2019.

c. Received and filed update on pending proposals.

MOTION: Dear SECOND: Barger APPROVED: 9-0-0
AYES: Barger, Close, Dear, Hahn, McCallum, Mirisch, Mitchell (Alt. for Finlay), Smith, Gladbach
NOES: None.
ABSTAIN: None.
ABSENT: Finlay

6 CONSENT ITEM(S)

The Commission took the following action:

d. Resolution Making Determinations Disapproving Annexation No. 2014-04 to the City of Calabasas (West Agoura Road).

Commissioner Close stated that the February 12, 2019 letter from the City of Calabasas (City)

addresses legal issues, and he asked Legal Counsel to address those issues. Carole Suzuki (Legal Counsel) indicated that what is before the Commission today is to review the resolution (which is sufficient under the law), and to approve the content of the resolution as appropriately documenting the Commission's determinations at last month's meeting. Ms. Suzuki stated that many of the issues addressed in the City's letter are legal arguments which amounted to the City of Calabasas requesting that the Commission reconsider its determination to disapprove the annexation. A request for reconsideration was not timely and not before the Commission at this hearing.

Commissioner Close asked if the Commission should restrict public testimony to only non-legal issues. Ms. Suzuki indicated that this a consent item, not a public hearing (the public hearing was closed at last month's meeting). She indicated that members of the audience have filled out speaker cards for this consent item and are permitted to provide testimony about the item.

Commissioner Mitchell asked what the requirements are for reconsideration. Ms. Suzuki stated that the requirements for reconsideration are outlined in the statute and in LAFCO's policy. In sum, the applicant must present new or different facts that could not have been presented previously at the hearing on the annexation.

The item was opened to receive testimony.

Illece Buckley-Weber (Mayor Pro Tem, City of Agoura Hills) came before the Commission. Ms. Buckley-Weber indicated that members of the audience who planned to testify agreed with the analysis made by the Commission, that reconsideration was not before the Commission, and therefore withdrew their speaker cards. A total of five (5) members of the audience who planned to testify withdrew their speaker cards.

Ms. Buckley-Weber; Deborah Klein Lopez (Councilmember, City of Agoura Hills); and Lloyd "Bill" Pellman (Partner, Nossaman LLP) who served as Special Counsel to Sachi Hamai (Chief Executive Officer, County of Los Angeles) came before the Commission. Each of them stated that they supported the resolution disapproving Annexation No. 2014-04 to the City of Calabasas.

Matthew Summers (Assistant Attorney, City of Calabasas) came before the Commission. Mr. Summers indicated that the City of Calabasas does not support the resolution disapproving Annexation No. 2014-04. Mr. Summers suggested that the Commission return with a resolution approving the annexation that was originally before the Commission at last month's meeting to avoid possible ligation.

Ms. Suzuki indicated that the City has an opportunity under the statute to seek reconsideration (during a 30-day reconsideration period) after the resolution is approved by the Commission.

Commissioner Smith stated that he voted against disapproving the annexation at last month's meeting and he does not support the original determination.

There being no further testimony, the Commission closed this item.

The Commission took the following action:

- Adopted the Resolution Making Determinations Disapproving Annexation No. 2014-04 to the City of Calabasas (West Agoura Road); Resolution No. 2019-01RMD.

MOTION:	McCallum SECOND: Mitchell (Alt. for Finlay) APPROVED: 9-0-0
AYES:	Barger, Close, Dear, Hahn, McCallum, Mirisch, Mitchell (Alt. for Finlay), Smith, Gladbach
NOES:	None.
ABSTAIN:	None.
ABSENT:	Finlay

8 PROTEST HEARING(S)

None.

9 OTHER ITEMS

a. FY 2018-19 Mid-Year Budget Status Report.

c. Alternate Public Member

The Commission continued Agenda Items 9.a. and 9.c. until next month's meeting.

[Commissioner Brogin-Falley left at 10:29 a.m.]

9 OTHER ITEMS

The following item was called up for consideration:

b. As-Needed Alternate Legal Counsel.

The EO summarized the staff report on As-Needed Alternate Legal Counsel.

The Commission took the following action:

- Directed the Executive Officer to execute contract amendments, for a new term of three years and adjusting billing rates, with no other changes, with the law firms of Best Best & Krieger; Meyers Nave; Nossaman LLP; and Renne Sloane Holtzman Sakai LLP; and bring back the contracts to the Commission for approval at a future meeting.

MOTION:	Dear SECOND: Mitchell (Alt. for Finlay) APPROVED: 9-0-0
AYES:	Barger, Close, Dear, Hahn, McCallum, Mirisch, Mitchell (Alt. for Finlay), Smith, Gladbach

NOES: None.
ABSTAIN: None.
ABSENT: Finlay

10 LEGISLATION

a. As-Needed Alternate Legal Counsel.

The Commission continued Agenda Item 10.a. until next month's meeting.

11 MISCELLANEOUS CORRESPONDENCE RECEIVED

a. Letter from Los Angeles City Council President Herb J. Wesson, Jr., appointing City Councilman Greig Smith as a voting member on the Commission representing the City of Los Angeles, dated January 23, 2019; and

b. Letter from City of Los Angeles City Clerk Holly L. Wolcott informing LAFCO that Los Angeles City Council President Herb J. Wesson, Jr. of the appointment of Councilman Greig Smith as a voting member on the Commission representing the City of Los Angeles, dated January 23, 2019.

12 COMMISSIONERS' REPORT

Commissioner Dear and Chair Gladbach stated that they attended the Southern Region of CALAFCO on January 14th, and that it was an informative meeting.

13 EXECUTIVE OFFICER'S REPORT

The EO announced that the Form 700 filing (elected officials are required to file as Form 700 which provides transparency and ensures accountability) is due April 2, 2019.

14 PUBLIC COMMENT

None.

15 FUTURE MEETINGS

March 13, 2019
April 10, 2019
May 8, 2019
June 12, 2019

16 FUTURE AGENDA ITEMS

Commissioner Hahn requested that a future item be agenized for the Commission to review the

Los Angeles County Department of Public Works Request for Proposal before it goes out to the bidders as it relates to the Sativa County Water District.

17 ADJOURNMENT MOTION

On motion of Commissioner Hahn, seconded by Commissioner Smith, the meeting was adjourned at 10:32 a.m.

Respectfully submitted,

Paul Novak, AICP
Executive Officer

L: minutes 2019\02-13-19

LA LAFCO
Register Report
February 2019

	Type	Date	Num	Name	Paid Amount	Balance
Feb 19						
	Check	02/01/2019	ADP	ADP	-39.37	-39.37
	Check	02/01/2019	WIRE	TRPF 80 South Lak...	-8,567.76	-8,607.13
	Check	02/08/2019	ADP	ADP	-170.08	-8,777.21
	Bill Pmt -Check	02/12/2019	10255	CALAFCO'	-980.00	-9,757.21
	Bill Pmt -Check	02/12/2019	10256	Certified Records M...	-507.31	-10,264.52
	Bill Pmt -Check	02/12/2019	10257	CoreLogic	-28.80	-10,293.32
	Bill Pmt -Check	02/12/2019	10258	FedEx	-135.70	-10,429.02
	Bill Pmt -Check	02/12/2019	10259	LACERA-OPEB	-1,679.04	-12,108.06
	Bill Pmt -Check	02/12/2019	10260	Office Depot*	-203.42	-12,311.48
	Bill Pmt -Check	02/12/2019	10261	Printing and Copy St...	-257.33	-12,568.81
	Bill Pmt -Check	02/12/2019	10262	Promac Image Syst...	-207.18	-12,775.99
	Bill Pmt -Check	02/12/2019	10263	Wells Fargo	-383.25	-13,159.24
	Check	02/14/2019	10264	Registrar-Recorder/...	-75.00	-13,234.24
	Check	02/15/2019	DD	Ambar De La Torre	-1,945.68	-15,179.92
	Check	02/15/2019	DD	Douglass S Dorado	-2,916.47	-18,096.39
	Check	02/15/2019	DD	Michael E Henderson	-2,297.77	-20,394.16
	Check	02/15/2019	DD	Patricia Knoebl-Wood	-1,338.43	-21,732.59
	Check	02/15/2019	DD	Paul A Novak	-5,240.66	-26,973.25
	Check	02/15/2019	DD	Alisha O'Brien	-2,264.06	-29,237.31
	Check	02/15/2019	DD	Adriana Romo	-3,227.45	-32,464.76
	Check	02/15/2019	DD	Federal Tax Deposit	-4,304.90	-36,769.66
	Check	02/15/2019	DD	State Income Tax	-1,292.11	-38,061.77
	Check	02/22/2019	ADP	ADP	-135.39	-38,197.16
	Bill Pmt -Check	02/26/2019	10265	ATT	-293.61	-38,490.77
	Bill Pmt -Check	02/26/2019	10266	Bank of America*	-409.37	-38,900.14
	Bill Pmt -Check	02/26/2019	10267	County Counsel	-5,937.98	-44,838.12
	Bill Pmt -Check	02/26/2019	10268	LACERA	-13,693.27	-58,531.39
	Bill Pmt -Check	02/26/2019	10269	Motor Parks	-630.00	-59,161.39
	Bill Pmt -Check	02/26/2019	10270	The Lincoln National	-272.58	-59,433.97
	Bill Pmt -Check	02/26/2019	10271	Tropical Interior Plants	-100.00	-59,533.97
	Check	02/28/2019	58955...	Kathryn Barger	-134.09	-59,668.06
	Check	02/28/2019	58955...	Brogin-Falley Lori	-138.53	-59,806.59
	Check	02/28/2019	DD	Richard Close	-138.53	-59,945.12
	Check	02/28/2019	DD	Donald Dear	-411.61	-60,356.73
	Check	02/28/2019	58955...	Edward G Gladbach	-322.99	-60,679.72
	Check	02/28/2019	DD	Janice K Hahn	-135.19	-60,814.91
	Check	02/28/2019	DD	Gerard McCallum II	-138.53	-60,953.44
	Check	02/28/2019	58955...	John A Mirisch	-138.53	-61,091.97
	Check	02/28/2019	58955...	Judith M Mitchell	-138.53	-61,230.50
	Check	02/28/2019	58955...	Greig L Smith	-138.53	-61,369.03
	Check	02/28/2019	DD	Federal Tax Deposit	-238.20	-61,607.23
	Check	02/28/2019	DD	Ambar De La Torre	-1,945.68	-63,552.91
	Check	02/28/2019	DD	Douglass S Dorado	-2,916.47	-66,469.38
	Check	02/28/2019	DD	Michael E Henderson	-2,297.78	-68,767.16
	Check	02/28/2019	DD	Patricia Knoebl-Wood	-1,338.42	-70,105.58
	Check	02/28/2019	DD	Paul A Novak	-5,090.65	-75,196.23
	Check	02/28/2019	DD	Alisha O'Brien	-2,264.06	-77,460.29
	Check	02/28/2019	DD	Adriana Romo	-3,327.80	-80,788.09
	Check	02/28/2019	DD	Federal Tax Deposit	-4,404.90	-85,192.99
	Check	02/28/2019	DD	State Income Tax	-1,342.11	-86,535.10
Feb 19					-86,535.10	-86,535.10

		AGENDA ITEM NO. 6c March 13, 2019					
		PENDING PROPOSALS As of March 6, 2019					
		LAFCO Designation	**Applicant**	**Description**	**Status**	**Date Filed**	**Est. Date of Completion**
1	DD	**Annexation 2006-12 to Los Angeles County Waterworks District No. 40**	Land Resource Investors	Annex 20 acres of vacant land located at the northeast corner of Avenue J and 37th Street East, City of Lancaster. Will be developed into 80 single family homes.	Incomplete filing: property tax transfer resolution, registered voter and landowner labels.	5/16/2006	Unknown
2	DD	**Annexation No. 2006-46 to Los Angeles County Waterworks District No. 40**	New Anaverde, LLC	Annex 1,567 acres of vacant land located near Lake Elizabeth Road and Avenue S in the city of Palmdale. Will be developed into 313 single family home.	Incomplete filing: CEQA, registered voter labels, landowner labels, and approved map and legal.	10/5/2006	Unknown
3	DD	**Annexation No. 2011-17 (2006-50) to Los Angeles County Waterworks District No. 40**	Behrooz Haverim/Kamyar Lashgari	Annex 20.62 acres of vacant land located south of Avenue H between 42nd Street West and 45th Street West in the City of Lancaster. To be developed into single family homes	Incomplete filing: property tax transfer resolution, registered voter and landowner labels.	12/1/2006	Unknown
4	DD	**Annexation 2008-13 to Los Angeles County Waterworks District No. 40**	Lancaster School Dist.	Annex 20.47 acres of vacant land located 2 miles west of the Antelope Valley frw. And the nearest paved major streets are ave. H. And Ave. I, in the City of Lancaster. For future construction of a school.	Need BOE fees to place on agenda for approval. Emailed district for fees on 4-18-17.	9/22/2008	Unknown
5	DD	**Reorganization 2010-04 Los Angeles County Waterworks District No. 29**	Malitex Partners, LLC	Detach 88 acres of vacant land from the Las Virgenes Municipal Water District and annex same said territory to Los Angeles County Waterworks District No 29 and West Basin Municipal Water District. The project includes future construction of three homes and dedicates open space. The project site is located north of Pacific Coast Highway at the end of Murphy Way, in the unincorporated area adjacent to Malibu.	Notice of Filing sent 07-15-10. Incomplete filing: CEQA. EIR on hold 4-14-15. Applicant requested to keep this file open, pending details how to proceed with the project 04/29/15.	6/9/2010	Unknown
6	DD	**City of Palmdale Annexation 2010-05**	City of Palmdale	49.6 acres located adjacent to residential properties to the southwest, southeast, and separated by the Amargosa Creek to the north.	Notice of Filing sent 1-3-11 Incomplete filing: property tax transfer resolution, insufficient CEQA, unclear pre-zoning ordinance, approved map and legal. Need to include DUC .	10/25/2010	Unknown
7	DD	**Reorganization 2011-16 (Tesoro del Valle)**	Montalvo Properties LLC	Annexation to NCWD and CLWA SOI Amendments for both districts. 801.53 acres regional access is provided via Interstate 5 (1-5) for north/south travelers from the east, and State Route 126 (SR-126) for travelers from the west. The existing local thoroughfare that provides access to the proposed area is Copper Hill Drive, which can be accessed directly from Tesoro del Valle Drive or Avenida Rancho Tesoro.	Notice of Filing sent 05-31-11. Incomplete filing: property tax transfer resolution. Project has changed ownership. Need new application	5/5/2011	Unknown
8	DD	**City of Los Angeles Annexation 2011-27**	Forestar Group	685 acres of uninhabited territory located east of Browns Canyon Road and northwest of Mason Ave, in the unincorporated area just north of the City of Los Angeles.	Notice of Filing sent 2-15-12 Incomplete filing: property tax transfer resolution, CEQA, pre-zoning ordinance, map of limiting addresses, list of limiting addresses, and approved map and legal.	12/8/2011	Unknown

		LAFCO Designation	Applicant	Description	Status	Date Filed	Est. Date of Completion
9	DD	**City of Palmdale Annexation 2011-19**	City of Palmdale	405 acres of uninhabited territory located between Palmdale Blvd and Ave S and 80th and 85th Street East.	Notice of Filing sent 3-22-12 Incomplete filing: property tax transfer resolution, inadequate CEQA, maps of limiting addresses, list of limiting addresses, and approved map and legal. DUC adjacent	3/8/2012	Unknown
10	DD	**Reorganization No. 2014-03 to the City of Calabasas**	City of Calabasas	176± acres immediately north of and adjacent to the 101 freeway between the City of Calabasas and Hidden Hills.	Notice of Filing sent 1-8-15, Incomplete filing: property tax transfer resolution and approved map and legal.	12/10/2014	Unknown
11	DD	**Annexation No. 2015-11 to the City of Palmdale (Desert View Highlands)**	City of Palmdale	284 acres inhabited territory. Generally located north and south of Elizabeth Lake Road between Amargosa Creek and 10th street west, in Los Angeles County unincorporated territory surrounded by the City of Palmdale	Notice of Filing sent 9-22-15 Incomplete filing: property tax resolution, attachment 'A' plan for municipal services, CEQA (NOD), party disclosure, pre-zoning, map of limiting addresses, registered voter info	9/15/2015	Unknown
12	DD	**Annexation No. 2015-10 to the City of Agoura Hills**	City of Agoura Hills	117 acres uninhabited territory. Located northeast and southwest of Chesebro Road directly north of the Highway 101	Notice of Filing sent 11-3-15 Incomplete filing: property tax transfer resolution.	11/2/2015	Unknown
13	DD	**Reorganization No. 2016-01 to the Las Virgenes Municipal Water District**	Las Virgenes Municipal Water District	Detachment from West Basin Municipal Water District, and annexation to the Las Virgenes Municipal Water District. Both districts require SOI amendments. The territory consists of 26 single-family homes, generally located south of Cairnloch Street, west of Summit Mountain Way. all within the City of Calabasas.	Notice of Filing send 04-19-16 Incomplete filing: property tax transfer resolution, and map and legal not approved.	2/22/2016	Unknown
14	AD	**Annexation No. 2017-02 to the Newhall County Water District**	Newhall County Water District	uninhabited territory, located west of the 5 freeway and north of the intersection of The Old Road and Calgrove Blvd.	Notice of Filing sent 06-21-17 Incomplete filing: property tax transfer resolution, CEQA, approved map and legal.	6/15/2017	Unknown
15	DD	**Annexation No. 2017-09 to the Wilmington Cemetery District**	Wilmington Cemetery District	inhabited territory around Wilmington	Notice of Filing sent 6-10-17 Incomplete filing: property tax transfer resolution	7/10/2017	Unknown
16	DD	**Reorganization No. 2017-10 to the Las Virgenes Municipal Water District**	Robert Douglass	5.26 acres of uninhabited territory. The affected territory is generally located northeast of the intersection of Hovenweep Lane and Schueren Road, in the unincorporated area north of Malibu	Notice of Filing Sent 11-30-17 Incomplete Filing: property tax transfer resolution, approved map and legal	11/8/2017	Unknown
17	AD	**Annexation 298 to District No. 15**	Sanitation Districts	4.01 acres of uninhabited territory. The affected territory is generally located on Del Valle Avenue west of the terminus of Mentz Street, all within the City of La Puente.	Notice of Filing Sent 01-04-18 Incomplete filing: property tax transfer resolution.	1/3/2018	Jun-2019

		LAFCO Designation	Applicant	Description	Status	Date Filed	Est. Date of Completion
18	AD	**Annexation 754 to District No. 21**	Sanitation Districts	0.4 acres of uninhabited territory. The affected territory is located on Padua Avenue approximately 100 feet south of Alamosa Drive, all within the City of Claremont.	Notice of Filing Sent 01-04-18 Incomplete filing: property tax transfer resolution.	1/3/2018	May-2019
19	AD	**Annexation 755 to District No. 21**	Sanitation Districts	2.5 acres of uninhabited territory. The affected territory is located on Via Padova approximately 400 feet west of Mt. Baldy Road, all within unincorporated Los Angeles County.	Notice of Filing Sent 01-04-18 Incomplete filing: property tax transfer resolution.	1/3/2018	May-2019
20	AD	**Santa Clarita Valley Sanitation District of Los Angeles County Annexation 1087**	Sanitation Districts	0.311 acres of uninhabited territory. The affected territory is located on the northeast corner of Ferguson Drive and Cherry Drive, all within the unincorporated area of Los Angeles County.	Notice of Filing Sent 2-15-18 Incomplete filing: property tax transfer resolution.	2/13/2018	May-2019
21	AD	**Santa Clarita Valley Sanitation District of Los Angeles County Annexation 1088**	Sanitation Districts	6.796 acres of uninhabited territory. The affected territory is located on Sierra Highway approximately 600 feet south of Quinn Drive, all within unincorporated Los Angeles County.	Notice of Filing Sent 2-15-18 Incomplete filing: property tax transfer resolution.	2/13/2018	Unknown
22	AD	**Santa Clarita Valley Sanitation District of Los Angeles County Annexation 1090**	Sanitation Districts	0.58 acres of uninhabited territory. Located on Sierra Highway approximately 150 feet south of Sand Canyon Road, all within unincorporated Los Angeles County.	Notice of Filing Sent 2-15-18 Incomplete filing: property tax transfer resolution.	2/13/2018	Unknown
23	DD	**Reorganization No. 2016-33 to the City of Los Angeles**	County of Los Angeles	1.34 acres of uninhabited territory located east of the intersection of W 116th St and Isis Avenue in the City of Los Angles.	Notice of Filing Sent 2-15-18 Incomplete filing: property tax transfer resolution, ceqa, party disclosure, and approved map and legal	2/3/2018	Unknown
24	AD	**Annexation 757 to District No. 21**	Sanitation Districts	0.566 acres of uninhabited territory. The affected territory is located on the southeast corner of Mountain Avenue and Sage Street, all within the unincorporated Los Angeles County.	Notice of Filing Sent 03-07-18 Incomplete filing: property tax transfer resolution.	3/7/2018	Unknown
25	AD	**Annexation 428 to District No. 22**	Sanitation Districts	1.67 acres of uninhabited territory. The affected territory is located on Crestglen Road approximately 300 feet east of Vista Bonita Avenue, all within the City of Glendora.	Notice of Filing Sent 03-22-18 Incomplete filing: property tax transfer resolution.	3/21/2018	Unknown
26	AD	**Annexation 297 to District No. 15**	Sanitation Districts	13.88 acres of uninhabited territory. The affected territory is located on the southwest corner of Loukelton Street and Echelon Avenue, all within the City of Industry.	Notice of Filing Sent 03-22-18 Incomplete filing: property tax transfer resolution.	3/21/2018	Unknown
27	DD	**Reorganization No. 2018-03 to the City of Arcadia**	Los Angeles County	.29 acres of uninhabited territory. Parcel 1 Is located at the intersection of Oak Avenue and Duarte Road in the City of Arcadia and Parcel 2 is Located along Standish Street east of the intersection Mayflower Avenue and Standish Street adjacent to the City of Arcadia.	Notice of Filing sent 5-9-18 Incomplete filing: property tax transfer resolution, CEQA, party disclosure, approved map and legal, pre-zoning and labels,	5/8/2018	Unknown
28	AD	**Annexation No. 430 to District No. 22**	Sanitation Districts	1.6± acres of uninhabited territory. The affected territory is located at the southwest corner of Baseline Road and Bunnelle Avenue, all within the City of La Verne.	Notice of Filing Sent 07-17-18 Incomplete filing: property tax transfer resolution.	7/16/2018	Unknown
29	AOB	**Dissolution No. 2018-09 for the Sativa County Water District**	LAFCO	179.80 acres of inhabited territory within the unincorporated community of Willowbrook and three non-contiguous areas located within the City of Compton.	Notice of Intention sent 6-19-18	Commission - Initiated proposal on 07-11-18	Unknown

		LAFCO Designation	Applicant	Description	Status	Date Filed	Est. Date of Completion
30	AD	**Annexation 756 to District No. 21**	Sanitation Districts	5.07± acres of inhabited territory. The affected territory is located on the south side of Baseline Road between Forbes Avenue and Allegany Court, all within the City of Claremont.	Notice of Filing Sent 09-6-18 Incomplete filing: property tax transfer resolution.	9/5/2018	Unknown
31	AD	**Annexation 758 to District No. 21**	Sanitation Districts	1.15± acres of uninhabited territory. The affected territory is located on Reedview Drive approximately 300 feet north of Shelyn Drive, all within unincorporated Los Angeles County.	Notice of Filing Sent 11-06-18 Incomplete filing: property tax transfer resolution.	11/5/2018	Unknown
32	AD	**Annexation 432 to District No. 22**	Sanitation Districts	0.5± acres of uninhibited territory. The affected territory is located on Walnut Avenue at the westerly terminus of Cannon Avenue, all within the City of San Dimas.	Notice of Filing Sent 11-06-18 Incomplete filing: property tax transfer resolution.	11/15/2018	Unknown
33	DD	**Annexation No 2018-10 to the Los Angeles County Waterworks District No. 40, Antelope Valley**	Robert Sarkissian	80.91± acres of uninhabited territory. The affected territory is located southeast of the intersection of Blackbird Street and 8Th Street West, in the City of Palmdale	Notice of Filing Sent 10-11-18 Incomplete filing: property tax transfer resolution, approved map and legal, CEQA, mailing labels landowners and registered voters	10/1/2018	Unknown
34	DD	**Annexation No. 2018-06 to the San Gabriel Valley Mosquito and Vector Control District**	San Gabriel Valley Mosquito and Vector Control District	77.55± acres of inhabited territory. The affected territory is located north of the intersection of Mountain Laurel Way and Highwood Court in the City of Azusa.	Notice of Filing Sent 11-1-18 Incomplete filing: property tax transfer resolution, approved map and legal	10/22/2018	Unknown
35	DD	**Annexation No. 2018-12 to the City of Agoura Hills**	City of Agoura Hills	82.58± acres of inhabited territory to the City of Agoura Hills. Area A of the affected territory is generally located east of the intersection of Liberty Canyon Road and Agoura Road and Area C is generally located west of the intersection of Liberty Canyon Road and Revere Way, in Los Angeles County unincorporated territory adjacent to the City of Agoura Hills	Notice of Filing sent 11-20-18 Incomplete filing: property tax transfer resolution, CEQA, map of limiting addresses, pre-zoning, register voter labels, approved map and geographic description.	11/19/2018	Unknown
36	AD	**Annexation 429 to District No. 14**	Sanitation Districts	640.07± acres of uninhabited territory. The affected territory is located on the southeast corner of Sierra Highway and Columbia Way, all within the City of Palmdale.	Notice of Filing Sent 11-29-18 Incomplete filing: property tax transfer resolution.	11/28/2018	Unknown
37	AD	**Santa Clarita Valley Sanitation District of Los Angeles County Annexation 1093**	Sanitation Districts	0.3± acres of uninhabited territory. The affected territory is located on Scherzinger Lane approximately 100 feet southwest of Sierra Cross Avenue, all within the City of Santa Claria.	Notice of Filing Sent 12-27-18 Incomplete filing: property tax transfer resolution.	12/26/2018	Unknown
38	AD	**Santa Clarita Valley Sanitation District of Los Angeles County Annexation 1097**	Sanitation Districts	230± acres of uninhabited territory. The affected territory is located south of Pico Canyon Road at the westerly terminus of Verandah Court, all within the unincorporated area of Los Angeles County.	Notice of Filing Sent 12-27-18 Incomplete filing: property tax transfer resolution.	12/26/2018	Unknown
39	DD	**Annexation No. 2018-11 to the Los Angeles County Waterworks District No. 40, Antelope Valley**	Lester Knox	20± acres of uninhabited tettitory. located southeast of the intersection of Mountain Springs Road and Hawk Free Court, in the unincorporated area known as Acton,	Notice of Filing Sent 1-17-18 Incomplete filing: property tax transfer resouluion, CEQA, approved map and legal	10-Jan	Unknown
40	AD	**Annexation 760 to District No. 21**	Sanitation Districts	0.48± acres of uninhabited territory. The affected territory is located north of the Pomona freeway approximately 300 feet west of Hacienda Boulevard, all within the unincorporated area of Los Angeles County.	Notice of Filing Sent 1-30-19 Incomplete filing: property tax transfer resolution.	1/30/2019	Unknown

		LAFCO Designation	Applicant	Description	Status	Date Filed	Est. Date of Completion
41	AD	**Annexation 430 to District No. 14**	Sanitation Districts	227.677± acres of unihabited territory. The affected territory is located north of Avenue D, south of Avenue B, east of the Southern Pacific Railroad, and west of Edwards Air Force Base, all within the unincorporated area of Los Angeles County.	Notice of Filing Sent 2-20-19 Incomplete filing: property tax transfer resolution.	2/12/2019	Unknown
42	AD	**Santa Clarita Valley Sanitation District of Los Angeles County Annexation 1091**	Sanitation Districts	4.158± acress of inhabited territory. The affected territory is located on Placeritos Boulevard approximately 200 feet west of Aden Avenue, all within the City of Santa Clarita.	Notice of Filing Sent 2-20-19 Incomplete filing: property tax transfer resolution.	2/12/2019	Unknown

Staff Report

March 13, 2019

Agenda Item No. 9.a.

Presentation by Gregory Pierce (Associate Director of Research, Luskin Center for Innovation and Adjunct Assistant Professor, Department of Urban Planning, UCLA)

Dr. Gregory Pierce of UCLA's Luskin Center will make a presentation concerning his work analyzing the performance of retail water service providers in Los Angeles County.

Dr. Pierce's research compiles information about definable metrics (i.e., compliance orders for violations of Primary Drinking Water Standards, rates, financial capacity) associated with more than two hundred (200) retail water service providers in Los Angeles County (staff notes that the Commission has jurisdictional authority over just thirty-five (35) of these providers). His work is largely focused on identifying potentially "challenged" agencies which provide water service to residents in disadvantaged communities.

Dr. Pierce will deliver a PowerPoint presentation addressing his preliminary research, as well as his on-going efforts.

As background, staff is enclosing copies of the following documents:

- Los Angeles County Community Water Systems, UCLA Luskin School of Public Affairs; November, 2015;
- Learning from California's Experience with Small Water System Consolidations; Berkeley Law; Center for Law, Energy, & The Environment; 2018; and
- Pritzker Policy Brief No. 11; The Emmett Institute on Climate Change and the Environment, UCLA School of Law; December, 2018.

Recommended Action:

Staff recommends that the Commission:

1. Open the public hearing;
2. Consider testimony from Dr. Gregory Pierce and any other interested parties;
3. Close the public hearing;
4. Receive and file the presentation from Dr. Pierce, "Drinking Water System Performance In LA County LAFCO Purview".

Drinking Water System Performance in LA County LAFCO Purview

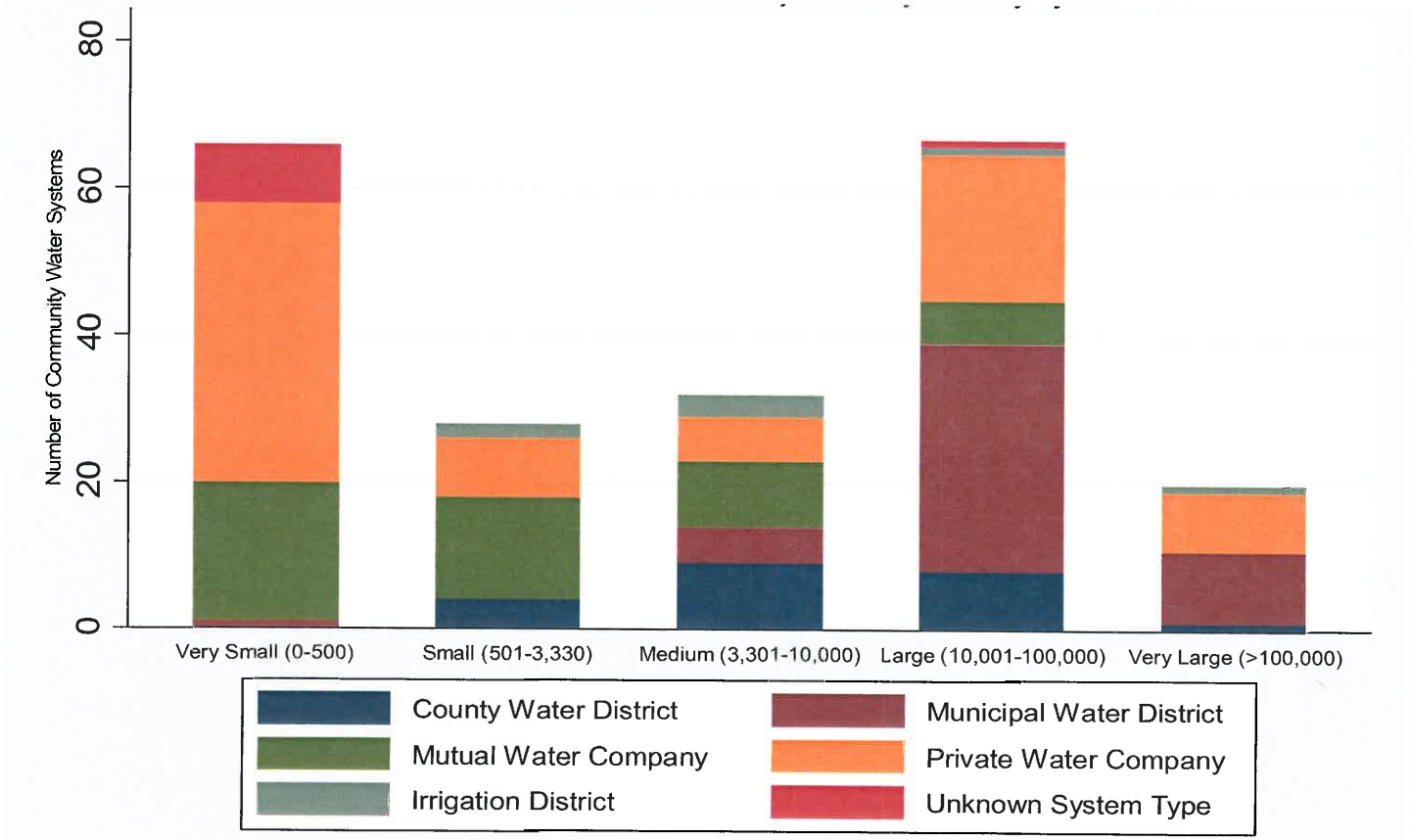
Dr. Gregory Pierce
gspierce@ucla.edu
March 13, 2019

UCLA Luskin School *of* Public Affairs

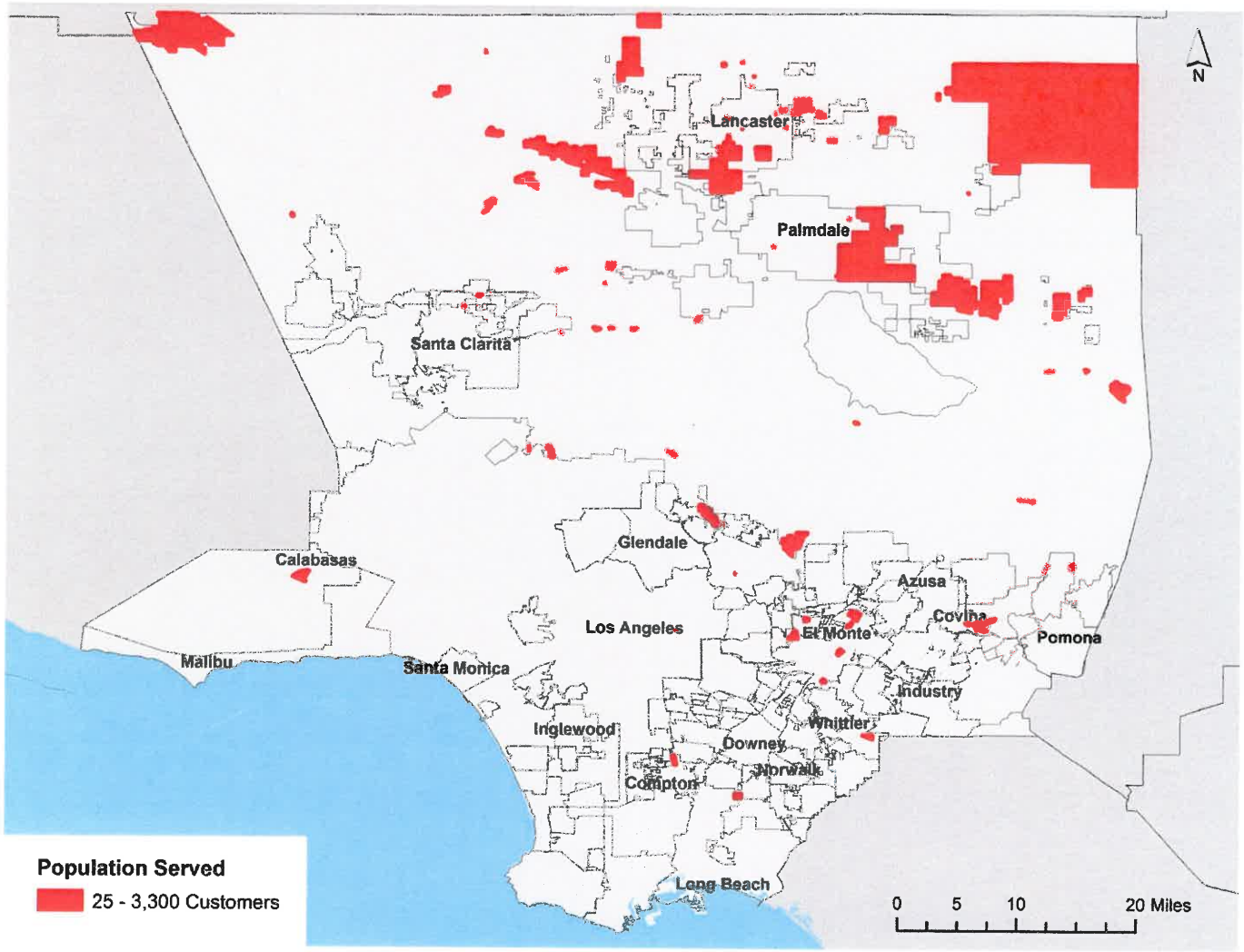
Luskin Center
FOR INNOVATION

Drinking water systems in LA County

Community Water Systems in Los Angeles County by Size and Type (n=218)



CWS in Los Angeles County: Size

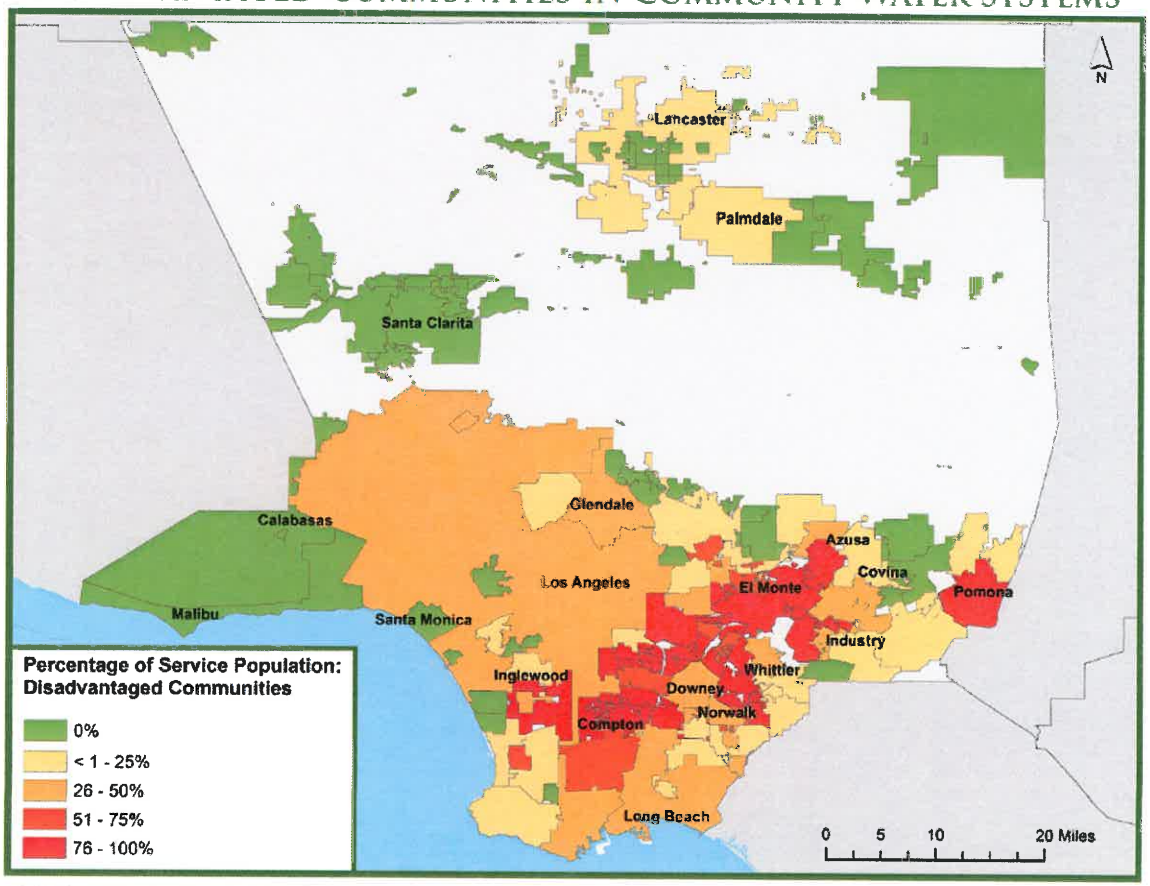


Water Systems in Southern California

County Name	Population	# of Systems	Average population served by system
Kern	848,204	187	4,536
Riverside	2,228,528	116	19,211
San Bernardino	2,056,915	151	13,622
Orange	3,051,771	45	67,817
Ventura	829,017	70	11,843
Los Angeles	**9,893,481**	**228**	**43,392**
LA Excluding LADWP	**5,943,481**	**227**	**26,183**
California state	37,659,181	3023	12,458

Disadvantaged Communities in Los Angeles

Disadvantaged Communities in Community Water Systems



Source: UCLA Luskin Center for Innovation, *see Methodology: "Disadvantaged Communities"*

The Human Right to Water in California

- Assembly Bill 685 (September 2012) says water must be :
  - "safe, clean,
  - affordable and
  - accessible"
- Requires state agencies to "consider" the right when adopting new policies or giving grants
  - Leg Examples: AB 401, SB 998, AB 1577, SB623,* AB 2501*

LAFCO Purview in Drinking Water Regulation

LA County	LAFCO systems	All other systems
# of systems	32	175
Average System Size excluding LA City	28,188	30,894
Total Population Served	902,901	9,406,601

"Safe, Clean": Health Violations since 1993

LA County	LAFCO systems	All Other Systems
Average #	1.22	1.82
Most by a system	8	51
Most common	Total Coliform Rule	Total Coliform Rule

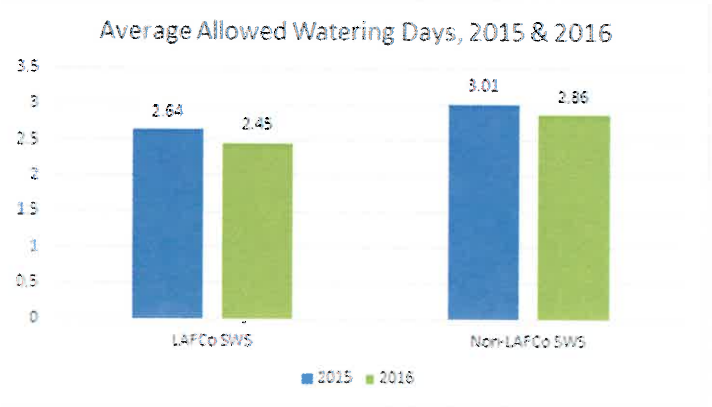
"Secondary" Contamination Problem

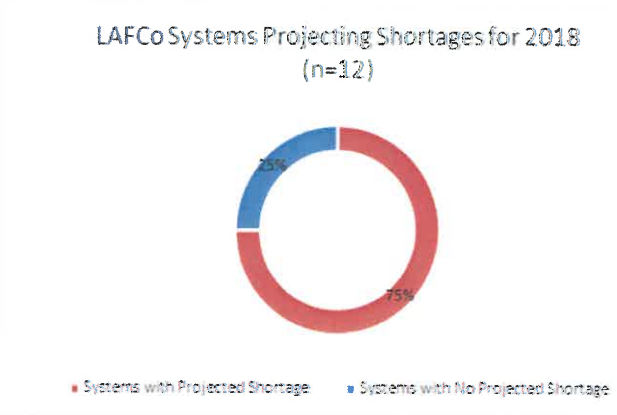
- Multiple, well documented accounts of discolored/ smelly/ poor-tasting water coming out of taps in disadvantaged communities
- Regardless of cause, households are not drinking the water and relying on alternative sources
- Examples: Sativa (but also Gardena, Watts/Jordan Downs, Sierra Madre Lomita)
- Board/EPA historically unresponsive but LA County Public Health is engaging on this issue

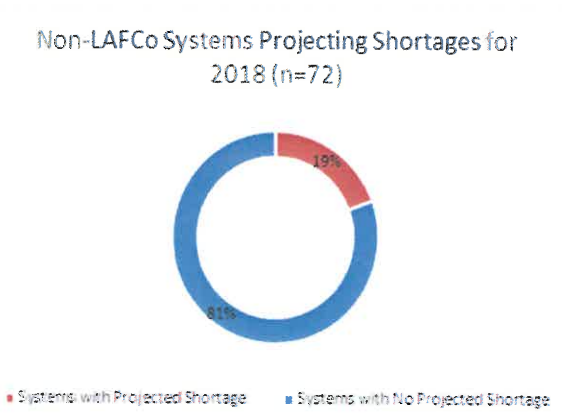
Affordability

LA County	LAFCO systems	All Other Systems
Average Monthly Rate at 12 CCF	$60	$61.50
Highest monthly rate charged	$134	$103
Systems Charging above $90/month	4	6

Accessibility: Use and Production







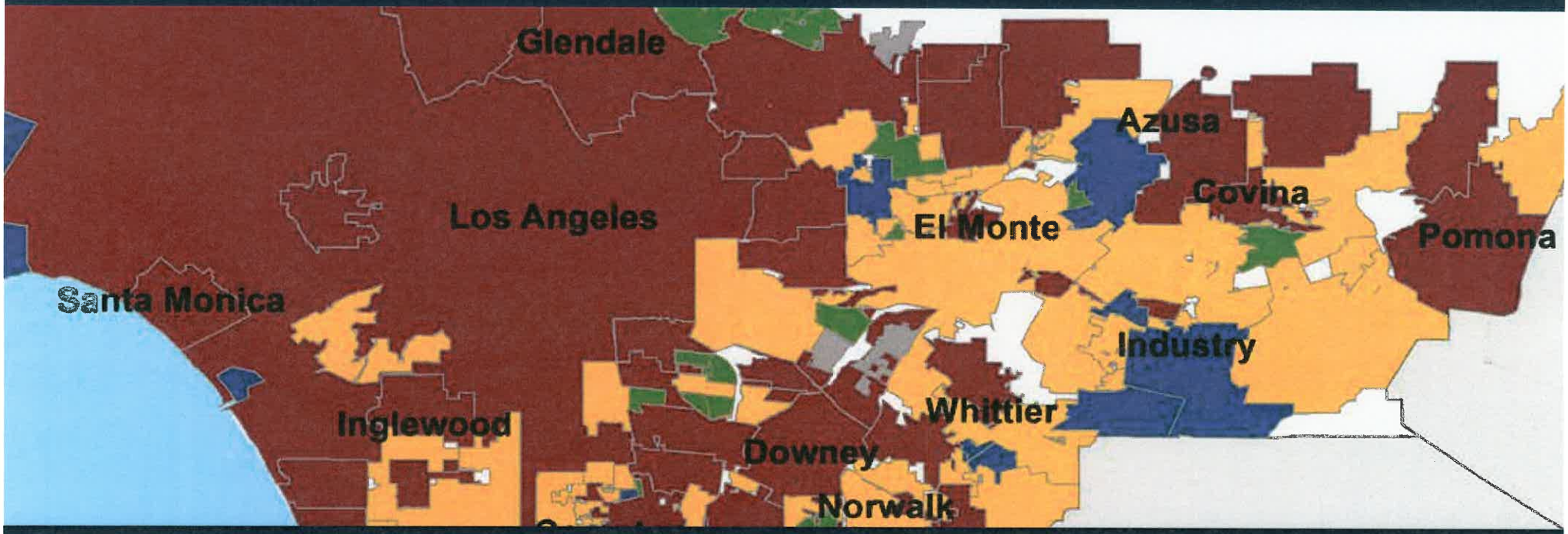
TMF: A "New" Warning Sign for Performance

- TMF: Technical, Managerial and Financial Capacity
- CA Water Board is about to undertake an assessment of TMF for at-risk small systems
- Many of the special district systems in LAFCO purview can be analyzed for TMF using data reported to state controller

Questions?

gspierce@ucla.edu

LOS ANGELES COUNTY COMMUNITY WATER SYSTEMS



ATLAS AND POLICY GUIDE

Supply Vulnerabilities, At-Risk Populations, Conservation Opportunities, Pricing Policies, and Customer Assistance Programs

UCLA Luskin School *of* Public Affairs

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FOR INNOVATION


WATER

Los Angeles County Community Water Systems:

Atlas and Policy Guide

Supply Vulnerabilities, At-Risk Populations, Conservation Opportunities, Pricing Policies, and Customer Assistance Programs

UCLA Luskin Center for Innovation

Established with a gift from Meyer and Renee Luskin, the UCLA Luskin Center for Innovation translates world-class research into real-world policy and planning solutions. Organized around initiatives, the Luskin Center addresses pressing issues of energy, water, transportation and sustainability. The Luskin Center is based in the UCLA Luskin School of Public Affairs.

The following people from UCLA worked on this project:

Principal Investigator: J.R. DeShazo

Lead Authors: Gregory Pierce and Henry McCann

Initial Research Design and Data Analysis: Henry McCann

Design: Christian Zarate

Acknowledgements

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For More Information

Contact the UCLA Luskin Center for Innovation www.innovation.luskin.ucla.edu.

Printed in the United States.

Contents

TABLE OF MAPS

Introduction

Introduction to the Atlas and Policy Guide

Building Blocks of LA's Water Supply Network

Community water systems are the fundamental building blocks of California's drinking water supply network.

Despite the essential role water plays in Los Angeles County, surprisingly little is known about our community water systems. Community water systems are the fundamental building blocks of California's water supply network.[1] These systems are responsible for providing households, businesses, and governments with a reliable supply of clean water at a reasonable price. They are on the front lines of adapting to drought and climate change. They manage lifeline programs for the County's many low-income households. These systems are the portals through which federal, state, and regional officials implement water policies supporting water supply reliability, conservation, efficiency, affordability, environmental protection, and public health. Our analysis of these systems can be used to directly inform state-wide initiatives formed to address pressing drinking water concerns, such as emergency assistance efforts, the Water Energy Technology program, the recently-legislated Low Income Water Assistance Program and the work of the office of Sustainable Water Solutions.

Few people know that Los Angeles County currently has 228 community water systems. Each community water system is mapped in the Gazetteer on page 70. As we show, they vary dramatically in their size, geography, the types of communities they serve, and their technical, managerial, and financial capacities: ranging from a mobile home park of twenty-five residents in Antelope Valley to the Los Angeles Department of Water and Power with nearly four million customers. Every community water system has adopted one of eight governance structures, which are governed by five distinct bodies of state law. Adding to this complexity, smaller water systems are often exempted from statewide water conservation and consumption reporting regulations. As a result, federal and state oversight and knowledge of these community water systems is fragmented and often limited.

By providing this Atlas and Policy Guide we seek to improve policymakers' understanding of the population of community water systems within Los Angeles County and to provide a data resource for future researchers.

Number of Community Water Systems by Size and Governance Type

The guide begins by characterizing the number of community water systems by size and governance type. By understanding how many community water systems of each governance type serve the County, we may understand the scope of local impacts when California policymakers change the water, government, public utilities, municipal, or corporations codes. Similarly, by understanding the number of smaller water systems and the populations served by them, we may better appreciate local consequences of exempting these water systems from planning best practices and usage reporting regulations. This analysis recognizes that technical and managerial capacities of water systems vary across system size and governance type—setting the stage for evaluating their ability to adapt to emerging threats and opportunities as well as meet the needs of their vulnerable customers.

Threats and System Vulnerabilities

We characterize several important threats facing community water systems in Los Angeles County. By identifying which water systems are entirely dependent on local groundwater or imported water, we can begin to assess water supply risks. Those systems entirely dependent on local groundwater may be especially vulnerable to local sources of groundwater contamination and a changing climate, which we will also describe. Those systems entirely dependent on imported water will be vulnerable to changes in the quantity, quality, and costs of these outside sources. This characterization of supply dependence is essential if we are to appreciate the local impacts of state policy decisions such as the pass-through costs of the Bay Delta Conservation Plan, a reduction in the Department of Water Resources emergency aid to distressed water systems, or increased conveyance costs associated with climate change or energy policies.

California's community water systems spend millions of dollars annually on treating surface and groundwater sources before delivering drinking water to customers. Using a state database, we highlight community water systems in LA County that rely on contaminated groundwater sources. Community water systems with large customer bases and access to technical and managerial support can continuously protect their customers from harmful contaminants found in water sources. Small water systems often struggle to meet even basic water quality compliance rules and are more likely to expose their customers to unhealthy drinking water. This Atlas and Policy Guide will help federal, state, and local regulators as they consider the impact of subsidizing technical, financial, or managerial support for smaller water systems or tightening the drinking water quality standards.

We characterize how mid-21st century climate changes will impact each of the County's water systems differently by utilizing recently downscaled high-resolution climate predictions. By describing system-level changes in extreme heat days and average temperature, we can assist the planning efforts of water system managers in several ways. For example, increased average temperatures and extreme heat days will exacerbate drought conditions, increasing pressure on local groundwater supplies. Systems that contain irrigated landscaping, agriculture, or stock animals will experience elevated evapotranspiration rates, and thus increased consumption, if these water uses are retained.

Vulnerable Populations

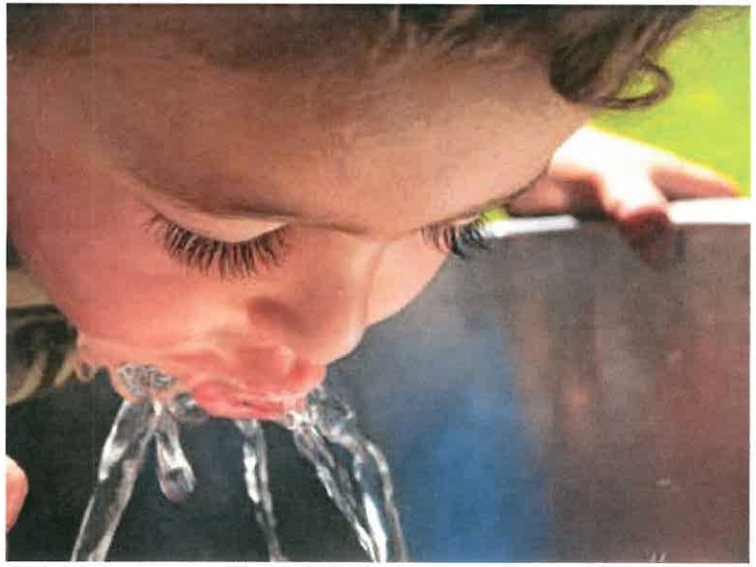
We also characterize the vulnerability of customers served by the County's community water systems. We identify those systems with high concentrations of disadvantaged communities, low-income households, and populations with disproportionate number of very young and old residents. By doing so, we identify where high water prices, shortages and water contamination may have their most adverse economic, social, and public health impacts. This enhanced understanding may empower regional and state policymakers to more effectively protect the rights of these populations to accessible, clean, and affordable water.

Built Environment Influences on Opportunities for Conservation

The opportunities for additional outdoor and indoor water conservation will depend upon the nature of the built environment served by each water system. Water systems with a larger number of single-family and owner-occupied homes may be able to significantly reduce their outdoor water consumption with incentives and rebates. Similarly, the larger the share of older residential buildings within a water system service area, the greater the potential for indoor water efficiency improvements, since older water fixtures and appliances tend to be less water efficient. We describe how these features of the built environment vary across water systems serving the County.

Public Access to System Information

We also assess whether and to what extent water systems provide their customers with access to vital information about water. As our primary accessibility indicator, we identify whether systems maintain a publicly-available website. Moreover, we assess the quality and depth of information displayed on system websites, including data on water conservation opportunities and rebates, pricing for water use, and low-income customer assistance. System websites should serve as reliable repositories for all customer information which systems also provide via less dynamic media, such as mailings and billboards. Websites also serve the vital and unique function of delivering up-to-date messages from state agencies to customers regarding water use restrictions and other emergency measures related to the drought. Maintaining a website should be relatively easy for systems, and will only become more important as the ubiquity of internet use increases among system customers.



Water Conservation Programs

In addition to outlining opportunities for conservation presented by the nature of the built environment served by each water system, we describe the range of conservation rebates and incentives which individual systems offer to customers to reduce both indoor and outdoor water use. Conservation incentive programs generally offer customers discounts to purchase water saving devices or rebates to make changes to their residence which lower water consumption. We also discuss differences in the ease of enrolling in such incentive programs.

Many water systems are already supported by the Metropolitan Water District's SoCal Water Smart program in providing conservation rebates to customers. However, the urgency of enhancing rebate programs and customer uptake is heightened in current drought conditions. Governor Brown's April, 1, 2015 Executive Order mandating that cities and large water districts reduce water usage by 25% below 2013 levels has brought the issue of conservation even more abruptly to the forefront of water systems' priorities across California. The state is also providing funding for the implementation of new conservation technologies, most notably through the Water Energy Technology Program launched in Summer 2015. This program may provide new forms of support for individual water systems, or retail agencies such as the Metropolitan Water District, to offer attractive conservation opportunities to customers. Our analysis suggests where and how state agencies may best target investment in conservation programs.

Water Pricing, Cost and Affordability

We also describe the water pricing policies maintained by community water systems in LA County. We calculate an average price level of water for households in each system, as well as consider whether the water service provided by systems is affordable for households. We also utilize the pricing data to assess the stability of revenue streams for systems. The structure of water pricing directly influences customer expenditure on water. The price of water in turn directly influences conservation behavior and affordability, which are two foci of this policy guide. From the perspective of households, higher water prices incentivize conservation and the adoption of water-saving technologies, but reduce affordability. From the perspective of community water systems, however, maintaining stable revenue is also a priority. Different water pricing structures enable systems to satisfy the three goals of affordability, conservation and revenue stability to varying extents. While there is a growing consensus that the best practice for system water pricing is a carefully-designed increasing block tariff structure with lifeline rates for basic consumption, the use of this pricing structure by systems is actually under threat across the state due to a recent court ruling on Proposition 218.

Without intervention, affordability is likely to become worse for customers due to always-increasing demands on water quantity across the state and the reliance on poorer quality water as older supplies dry up. Both of these factors drive up source costs for systems, which are ultimately passed on to customers in the form of price increases. In order to avoid affordability or health crises, systems will increasingly need to rely on the technical, financial and managerial assistance programs offered by the State Water Resources Board. If technical assistance is insufficient to make maintaining revenue and affordability goals viable for individual systems, the board must be proactive in encouraging consolidation of these systems with those which are better equipped. A more comprehensive data collection and analysis effort on the challenges facing systems statewide, however, is needed to enable the board to proactively assess and target systems which need these types of assistance.

Needs-Based Customer Assistance Programs

We conclude the report by assessing the types of needs-based customer assistance programs maintained by individual water systems to reduce the cost burden to vulnerable customers. We also analyze the ease of enrolling in assistance programs, which may serve as a significant enabler or barrier to households in need. There are few, if any, other direct means of public assistance available to support households to pay for water service. Eligibility for system-run assistance programs varies, but is most often based on income. The type of benefit offered also depends on the system, although fixed rebates or proportional discounts to regular water prices are the most common programs. Systems are not currently required by the state to maintain needs-based customer assistance programs, except if they are regulated by the California Public Utilities Commission. However, Assembly Bill 401, signed by Governor Brown in October 2015, calls for the establishment of a statewide Low-Income Water Rate Assistance Program by January 1, 2018.

Essential Functions of Community Water Systems

Essential Functions of Community Water Systems
Water Quality, Quantity, and Price

At the core of every community water system is the responsibility to provide customers with a reliable supply of clean water at an affordable price. The following section presents background knowledge on these essential functions in terms of the quality, quantity, and price of drinking water for residential customers.

Quantity

Essential potable water consumption in California takes place indoors, including water used for drinking, bathing, cleaning, and cooking. However, discretionary outdoor water use is the largest part of residential water use in California; at least half of all residential water use in the state is used for watering landscapes. The amount of potable water consumed by residential water users varies between different hydrologic regions in California. Estimates of daily residential water use range from 154 gallons per capita per day in the Central Coast area to 346 gallons per capita per day in the southeastern corner of the state. [2]

Quality

The Safe Drinking Water Act of 1974 established federal regulation of drinking water quality standards for bacterial and chemical substances known to impair public health. In California, the quality of drinking water sources and water in distribution systems is regulated by the State Water Resources Control Board. Testing for bacterial and chemical contamination in each community water system takes place over defined compliance periods. In general, bacteria levels in community water systems are monitored monthly, nitrates are measured annually and chemicals are monitored every three years. Water quality standards, called Maximum Contaminant Levels (MCLs) are designed to account for health risk, detectability, treatability, and cost-of-treatment.

Price

Most Californians live in community water systems that collect revenue through the sale of drinking water. Water sales revenue makes up an important part of community water systems' financial resources for funding operation and maintenance, regulatory compliance activities, conservation programs, and capital projects. With the exception of some large private community water systems, community water systems may establish water rates without state regulatory oversight. The affordability of water rates for households is determined by measuring the percent of household income spent on water service annually. Annual water service costs that exceed 1.5% of annual household income are considered unaffordable and "high-burden" by the California Department of Public Health. [3]

A future of climate change and intermittent drought in California will challenge the technical, managerial, and financial capacities of many community water systems. Confronted with significant uncertainty in consumption and available water supplies, community water systems may be forced to change the available quality, quantity, and price of water service. In the Threats and System Vulnerabilities section, we describe how supply characteristics of community water systems can compromise these essential functions in the face of climate change. In the Vulnerable Populations Served by Community Water Systems section, we describe how certain population groups are adversely impacted by the breakdown of a community water system's core functions.

Community Water Systems in Los Angeles County: Overview

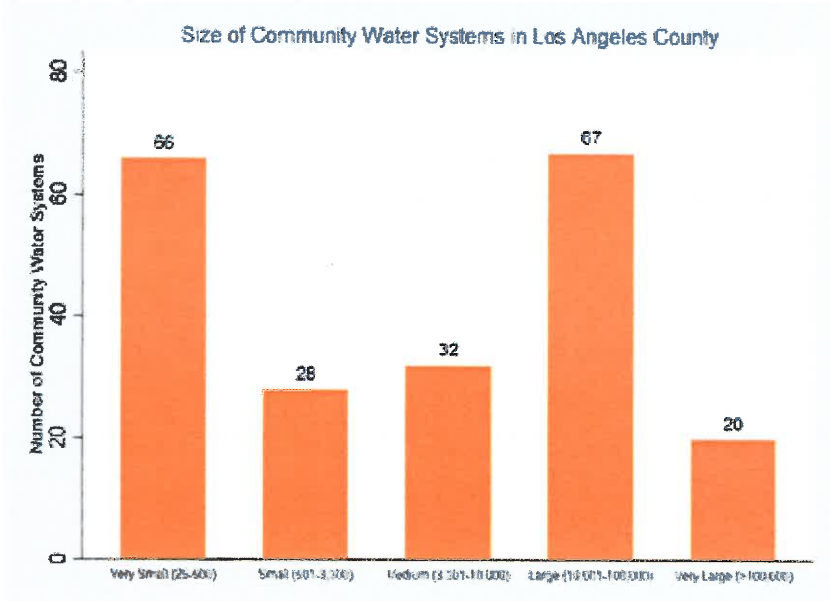
Los Angeles County is the most populous county in the United States and contains the City of Los Angeles, the largest city in California and the second largest in the United States. This study focuses on 213 community water systems that serve drinking water to the residents of Los Angeles County.[4] Population served per system ranges from twenty-five (Winterhaven Mobile Estates in Antelope Valley) to nearly four million (Los Angeles Department of Water and Power).

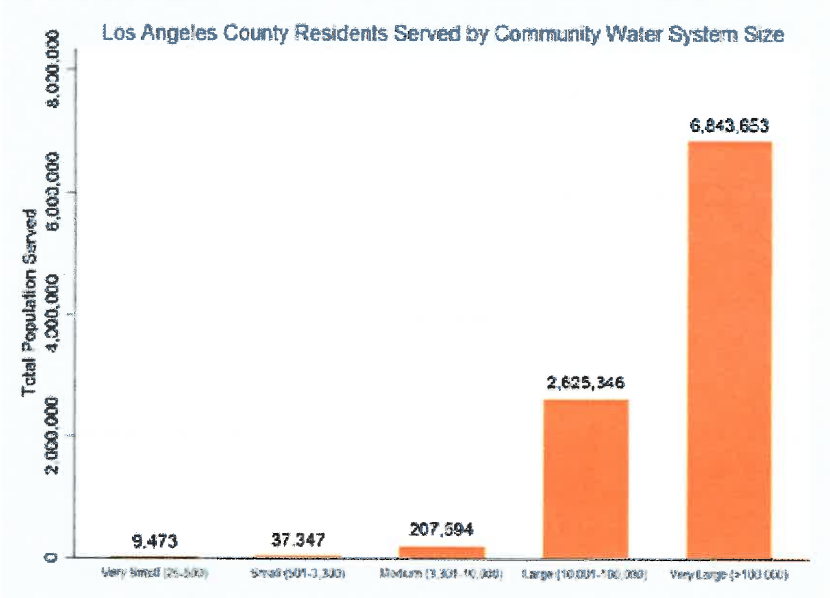
The size of a community water system is determined by the number of customers it serves. Very Small (25-500 customers) and Small (501-3,300 customers) water systems represent 44 percent of community water systems in the County. In terms of population served, over ninety percent of County residents are served by Large (10,001-100,000 customers) or Very Large (>100,000 customers) water systems.

Community water systems vary considerably with respect to water supply sources, governance types, technical, managerial and financial capacities, demographics, geography, and built environment. This Atlas and Policy Guide for LA County serves as a tool for understanding these key dimensions of community water systems.

This Community Water Systems Atlas and Policy Guide enables:

- ***Evaluation of local and regional impact of federal and state water policies;***
- ***Assessment of local and regional need for federal, state, and local financial resources;***
- ***Efficient deployment of water programs, and;***
- ***Identification of emerging issues related to climate change.***





Community Water Systems in Los Angeles County
Governance Structures

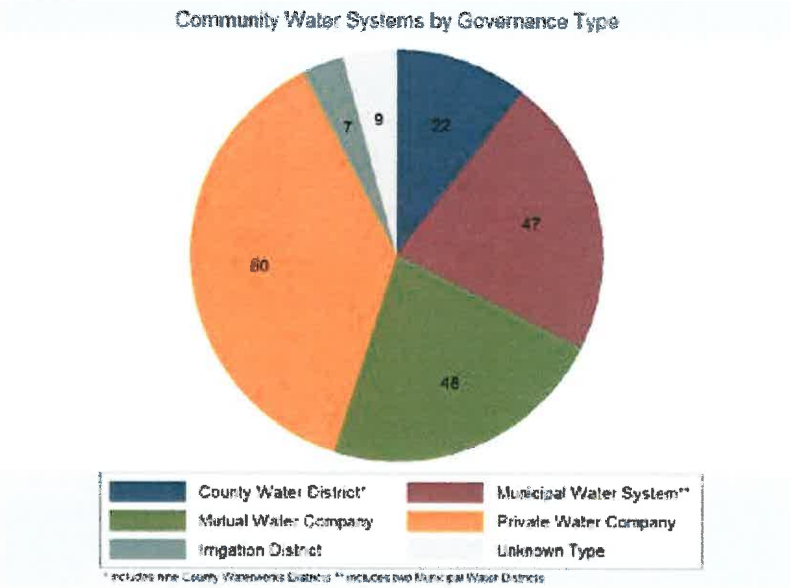
Every community water system balances complex infrastructure operations, stakeholder issues, regulatory compliance, and financial management in order to provide reliable and safe drinking water. The decision-making protocols that govern operation and management of community water systems fall into two principal categories: governmental entities and privately owned entities that provide drinking water.

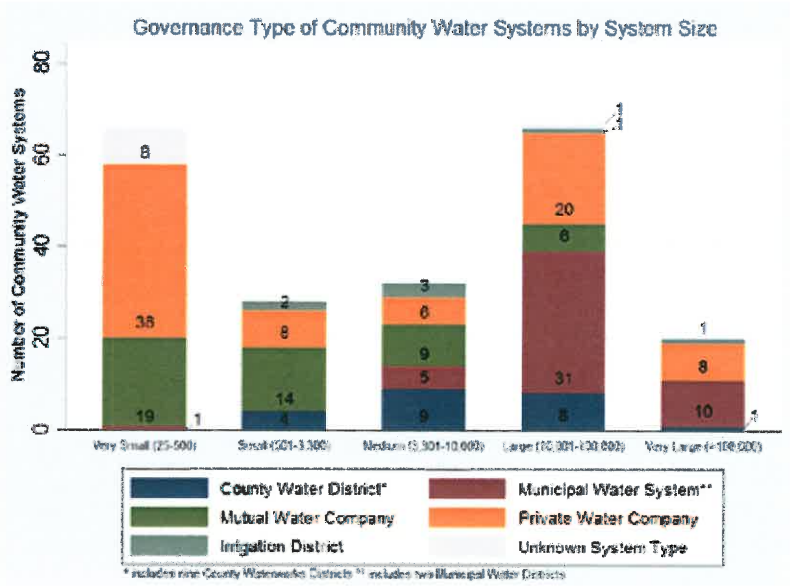
Each type of community water system is regulated by a different body of state law. Generally speaking, five bodies of state law regulate the formation and governance of community water systems. California Water Code regulates special districts like irrigation districts, county water districts and county waterworks districts, to name a few. The California Government Code regulates community services districts. California Public Utilities Code regulates public utility districts (Division 7) and private utility districts (governed by Public Utilities Commission). Municipal water systems are often governed by local municipal codes. Finally, mutual water companies are regulated by the California Corporations Code.[5] While water quality regulations and some state water conservation policies cut across all governance types, the lack of strong state intervention on community water system policies and practices may be attributable to the diversity of regulatory authority governing these systems.

Most community water systems in Los Angeles County are private, with the bulk of those systems being Very Small. Many of the private water systems are commercial businesses, like mobile home parks, that provide water as an ancillary benefit to their main commercial business. However, several larger community water systems are owned and operated by private companies. For example Suburban Water Systems, California Water Service Company and Golden State Water Company operate several large and discontinuous drinking water distribution systems in Los Angeles County.

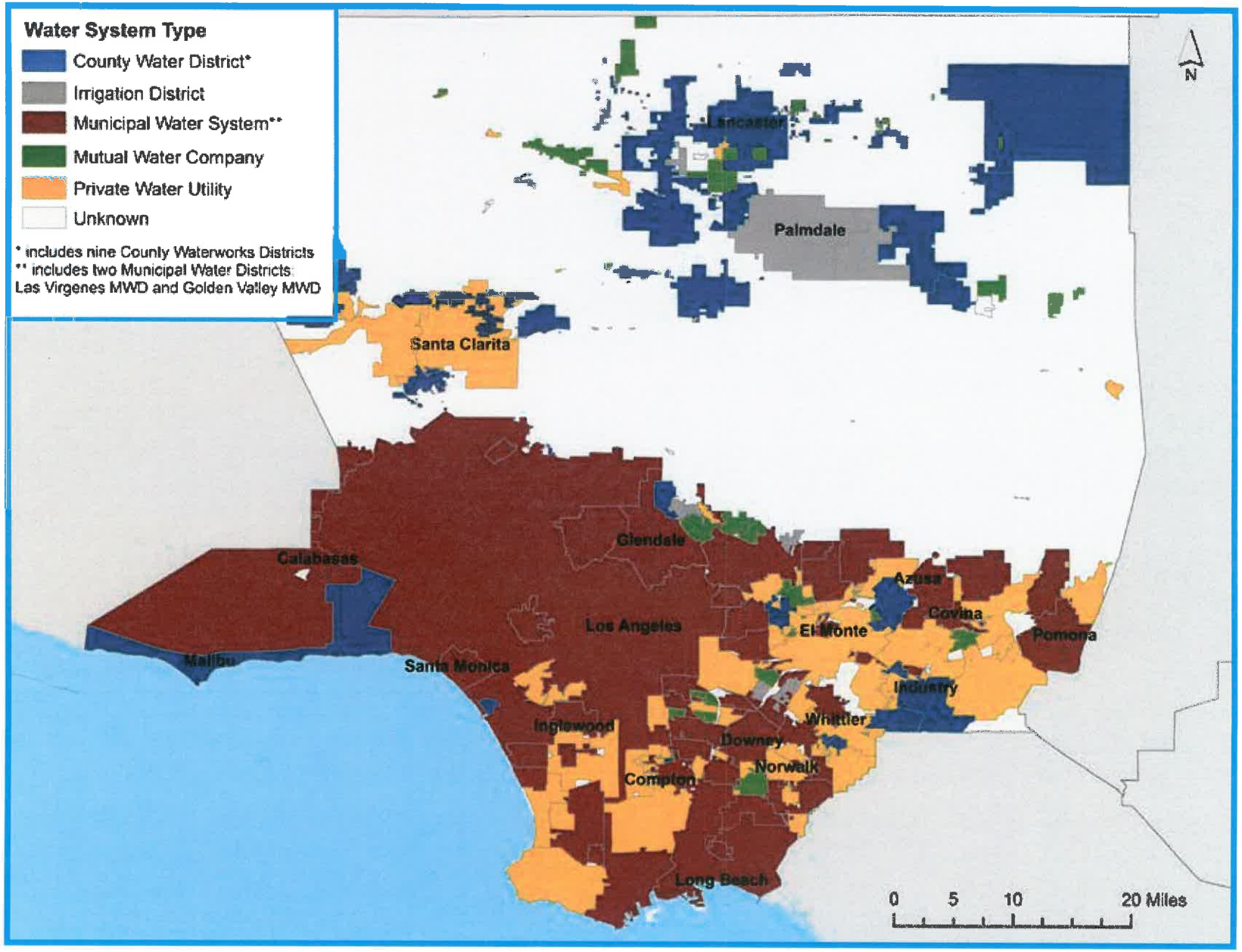
Mutual water systems, also called non-profit mutual water associations, are most prevalent in the form of Very Small and Small water systems. These mutual benefit associations are often formed as cooperatives between neighboring landowners to provide water service in small communities. They encounter few regulatory requirements with respect to public access to information, community participation, and water rate adjustments.[6]

The recent eligibility of regulated private water utilities and mutual water systems for grants through Prop 1 (2014) will require a clear understanding of the distribution of these water systems across the state, the existing and anticipated supply, quality, and capacity challenges faced by these systems, and the likely increase of unfunded demand for addressing these challenges through state grant assistance. The Atlas and Policy Guide will be a crucial resource for developing these analyses with respect to grant eligible community water systems in Los Angeles County.





Community Water System Governance Types



Source: UCLA Luskin Center for Innovation, *see Methodology: "Community Water System Boundaries"*

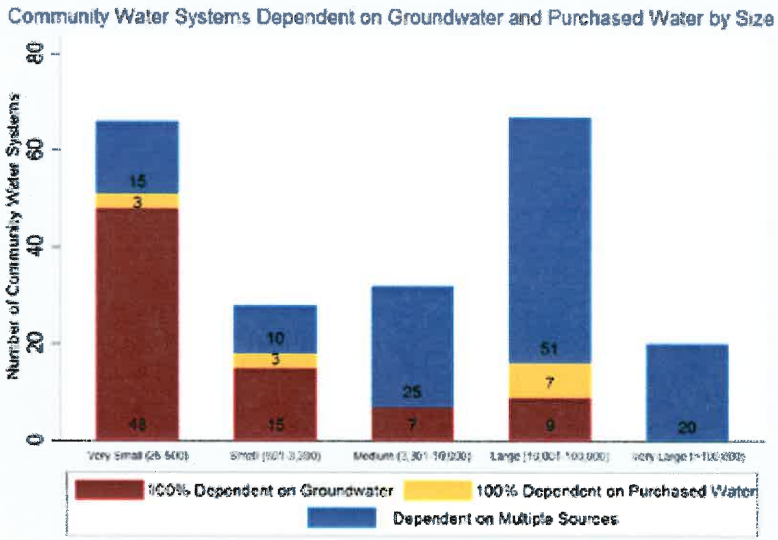
Threats and System Vulnerabilities

Dependence on a Single Type of Drinking Water Source

In the face of increasingly uncertain precipitation patterns and extremes in climate and hydrology, the composition of a community water system's portfolio of sources may indicate likely threats to water supply reliability over time. Water systems with unbalanced water supply portfolios are vulnerable to significant changes in climate and hydrology. In Los Angeles County, community water systems with single source dependency are likely to rely on either groundwater or purchased surface water. Each water source is subject to various conditions and constraints as a function of climate, precipitation, hydrology, and geography. These constraints are especially acute for systems with access to only one well or one wholesale connection, a topic for future research. The following sections describe the threats facing each primary drinking water source type and the likely impacts of climate change on the availability of these water resources.

Groundwater

It is a well-documented fact that during droughts, California increases its dependence on groundwater to replace scarce surface supplies.[7] In general, subsurface groundwater basins are naturally replenished by infiltration of surface runoff from snowmelt and precipitation. During droughts like the current three year critically dry period, water withdrawn from the ground exceeds the volume of water infiltrated by natural or artificial methods. Withdrawals from most of LA County's groundwater basins are monitored and regulated, due to prior adjudication. The Antelope Valley aquifer in northern LA County and southern Kern County, however, is not yet adjudicated. Many of the Very Small and Small water systems in the County that are solely dependent on groundwater are located in the Antelope Valley. The uncertainty of future groundwater supplies in un-adjudicated basins puts these Very Small and Small systems at significant risk for running out of water. State regulators may find this Atlas and Policy Guide valuable in identifying likely recipients of emergency drinking water funding for interim water supplies. In the long run, the mapping of groundwater dependent communities and characterization of their needs also provides a useful baseline resource for regional groundwater management as directed by the recent groundwater legislation AB 1739, SB 1168, and 1319.

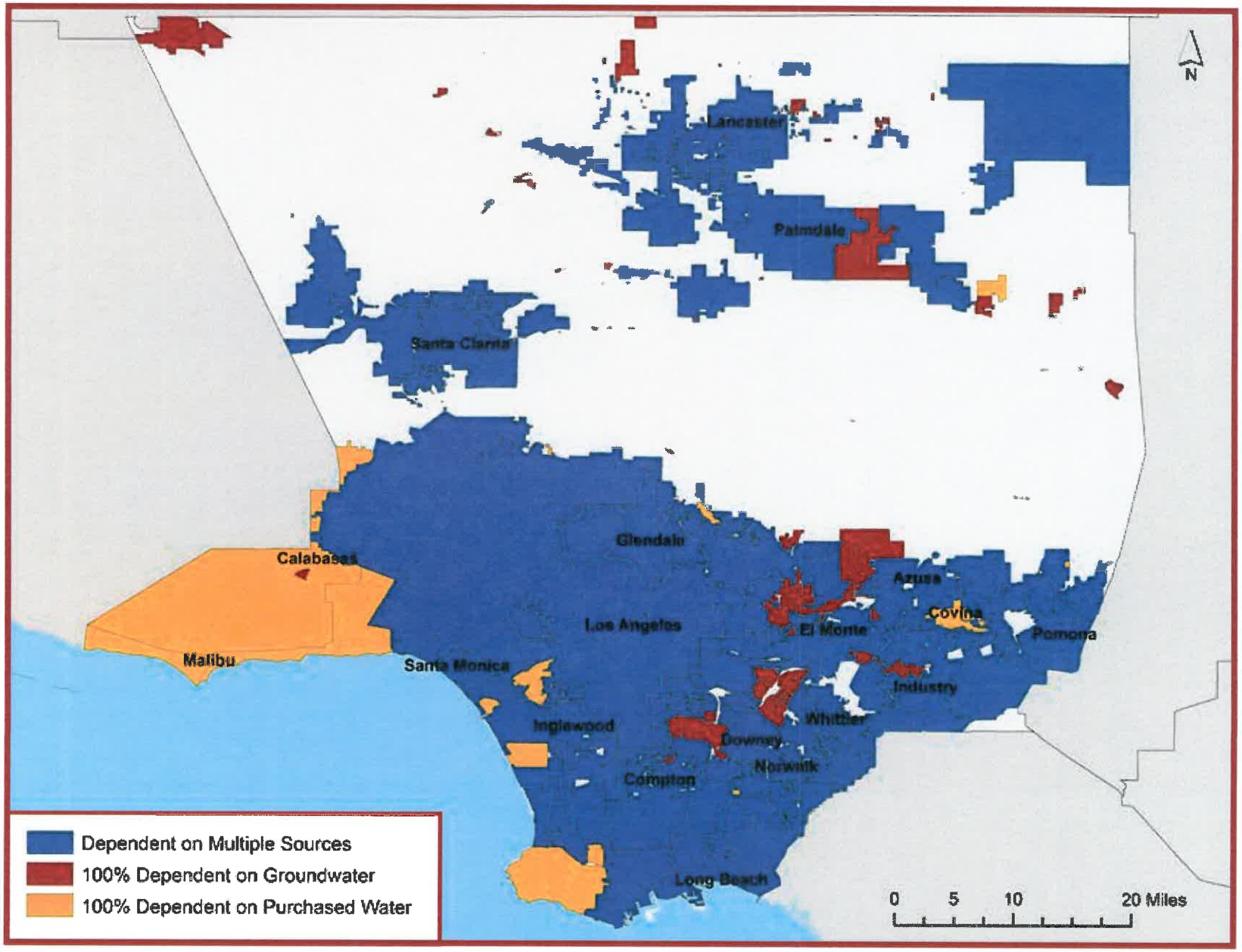


79 Community Water Systems in LA County are 100% dependent on groundwater for drinking water.

Imported Purchased Water

California has one of the most robust systems for the conveyance and delivery of imported water in the world. These supplies however are not immune to drought and the future impacts of climate change. For example, following three consecutive dry years, the State Water Project may supply only 10% of normal water deliveries in 2015.[8] Reduced inflows and the threat of sea level rise places significant pressure on the Bay Delta: a key ecosystem and water source for the state. The cost of mitigating these pressures will likely be borne by water contractors and the community water systems they serve.[9] This Atlas and Policy Guide highlights community water systems that are wholly or partially reliant on purchased surface water. This metric enables evaluation of the impacts from increasing uncertainty in supply and increasing cost of imported water on community water systems.

Water Source Dependency by Community Water System



Source: UCLA Luskin Center for Innovation, *see Methodology: "Community Water System Water Portfolio: Single Source Dependency"*

Reliance on Contaminated Groundwater

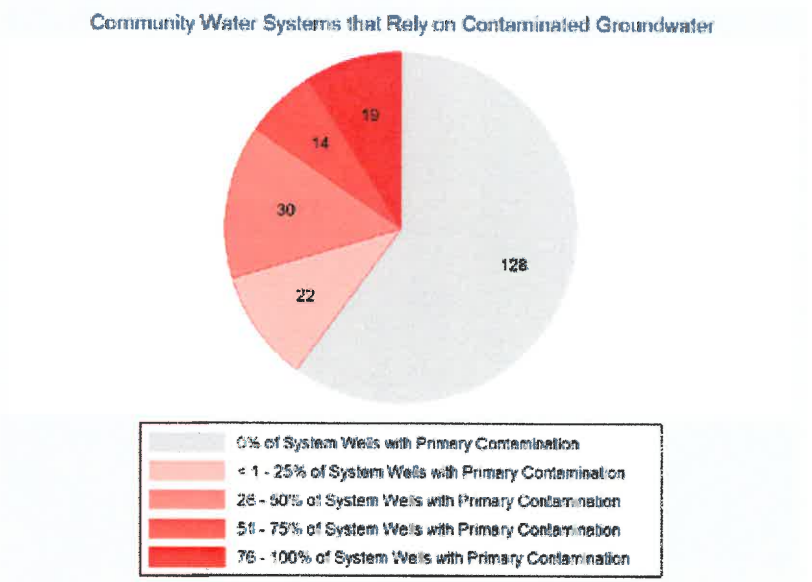
The U.S. Environmental Protection Agency (U.S. EPA) and State of California require community water systems to monitor the quality of the water it serves to customers. California sets thresholds for each contaminant (called Maximum Contaminant Levels) that account for health risk, detectability, treatability, and cost-of-treatment. In the 2002-2010 compliance period, state regulators detected chemical concentrations in raw groundwater sources that exceeded MCLs. Of every county in California, Los Angeles County serves the greatest number of community water systems that rely on contaminated groundwater. Forty percent of community water systems serving Los Angeles County had a principal contaminant detected in an active raw or active untreated drinking-water well at a concentration above an MCL on two or more occasions during the most recent California Department of Public Health compliance cycle (2002-2010).[10]

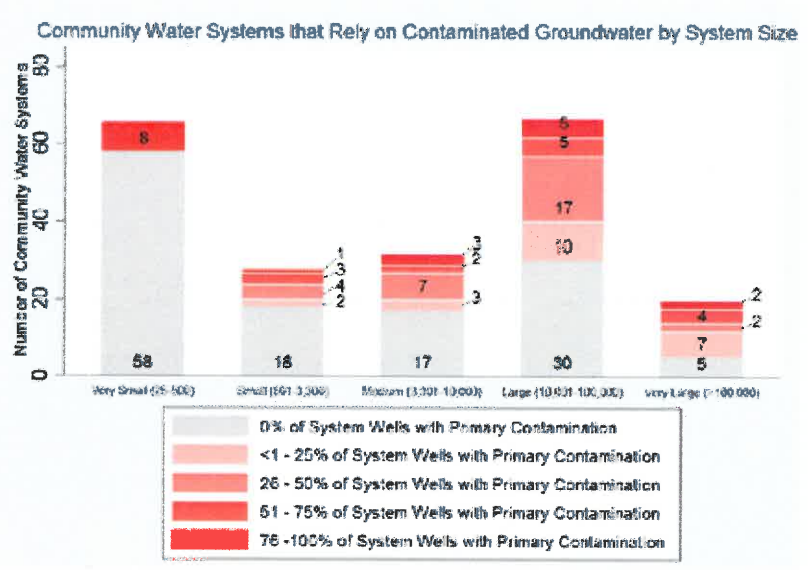
Of every county in California, Los Angeles County has the greatest number of community water systems that rely on contaminated groundwater.

Most Large and Very Large community water systems serving LA County have at least partial reliance on contaminated groundwater sources. Highly urbanized areas like San Fernando Valley and San Gabriel Valley impact their underlying aquifers through a legacy of contaminated runoff and industrial discharges. Despite relying on contaminated groundwater, Large and Very Large systems often have the advantage of multiple source options and access to treatment technologies.

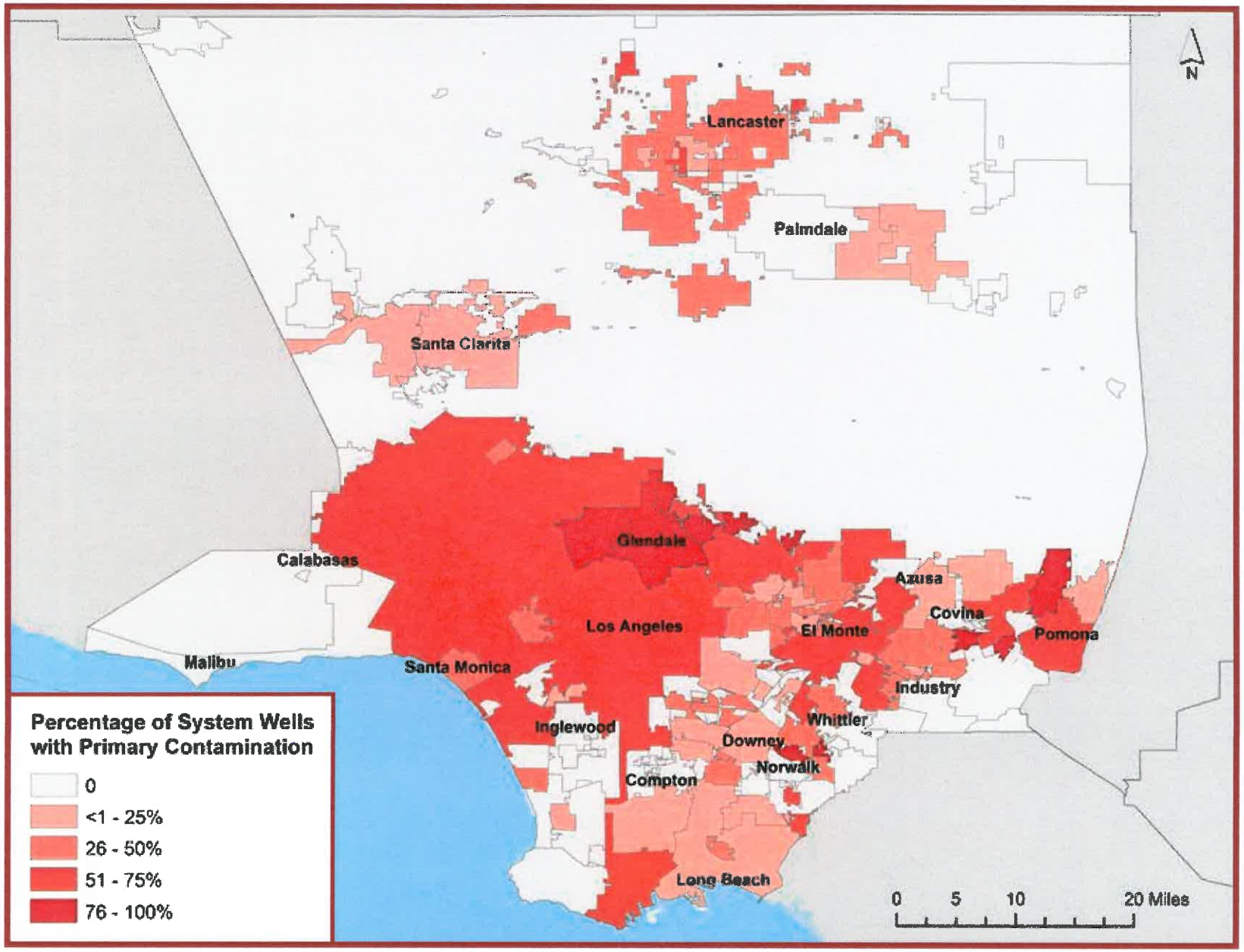
The cost of water treatment and aquifer clean-up will become a financial obstacle for many community water systems and the customers they serve. For example, the San Fernando Valley is a key potential source of groundwater for Los Angeles Department of Water and Power. Due to a legacy of industrial land uses in the Valley, half of the water in the aquifer is contaminated with a toxic plume. Proposals for transforming the Valley's aquifer into a reliable local water source through treatment will require an estimated $600 to $900 million dollars.[11]

This Atlas and Policy Guide highlights community water systems that are heavily dependent on contaminated groundwater, thereby benefitting the most from grants for groundwater cleanup and interim emergency drinking water funds. State and local agencies responsible for dispersing Prop 1 (2014) funds will benefit from this planning resource, which will help them maximize the impact of state financial assistance for groundwater cleanup.





Community Water Systems That Rely On Contaminated Groundwater



Source: UCLA Luskin Center for Innovation, *see Methodology: "Community Water Systems that Rely on Contaminated Groundwater Sources"*

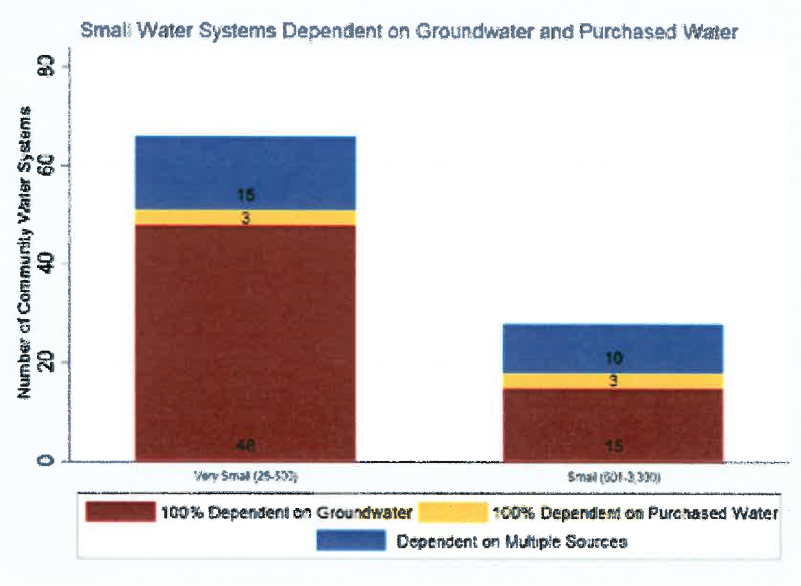
Small Community Water Systems

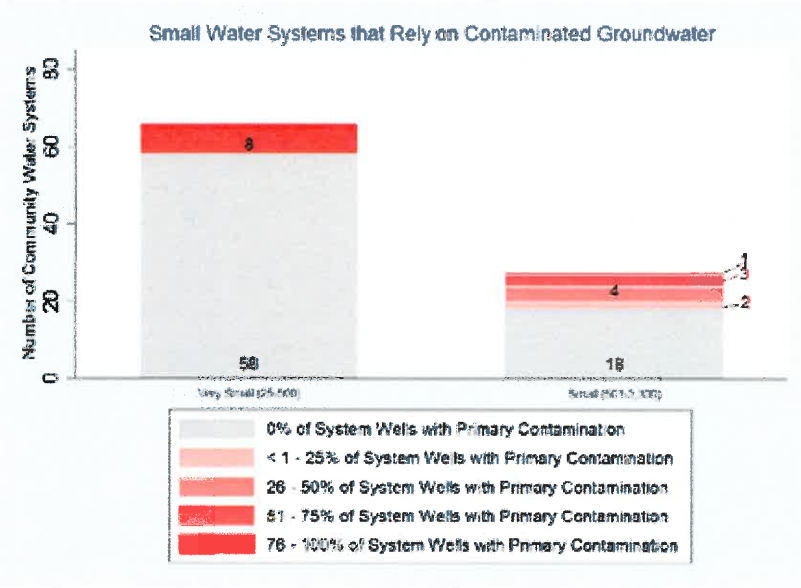
The majority of community water systems in LA County are Very Small and Small systems serving between 25 and 3,300 year-long residents. Very Small and Small community water systems are located in every corner of LA County, with a concentration in the Antelope Valley and the foothills of the San Gabriel Mountains. Seventy-three percent of Very Small and fifty-four percent of Small water systems are solely reliant on groundwater as a source of drinking water. While the bulk of these systems rely on clean groundwater, six Very Small systems are solely dependent on contaminated groundwater. During periods of drought, community water systems are likely to rely more heavily on groundwater, even if it is contaminated.

Researchers and regulators agree that smaller water systems lack the technical, financial, and managerial capacity to build and maintain major improvements to water system infrastructure.[12,13] Costly capital projects that may be integral to the system's operation, like drilling deeper wells and treating contaminated groundwater, are currently out of reach for many smaller water systems. Without a strong fiscal base to draw on, smaller water systems will struggle to adapt to a changing climate.

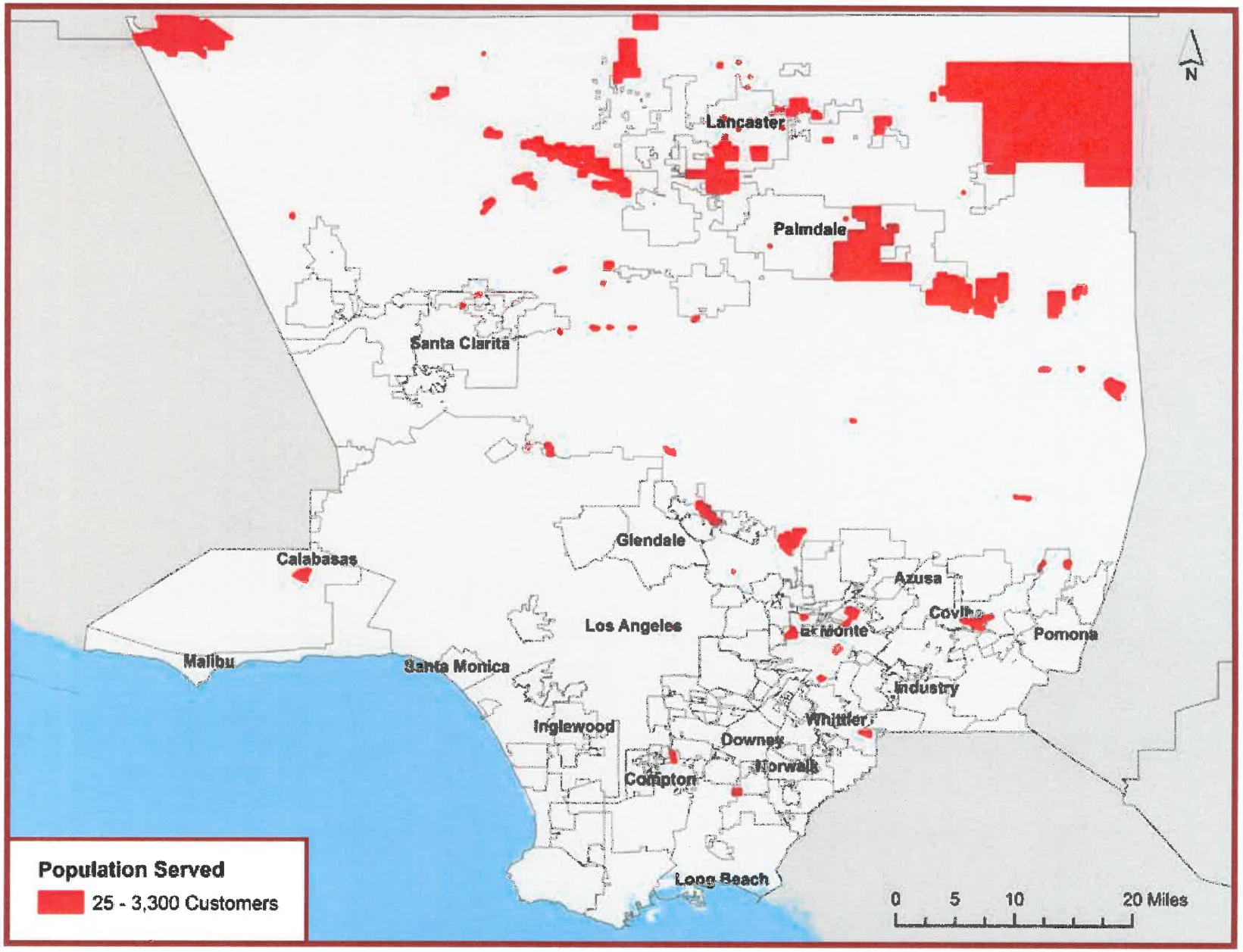
During the most recent drought period, Governor Brown approved an emergency drought relief package, of which $4 million is to be directed to at-risk water systems in need of interim replacement drinking water. The State Water Board could use this spatial resource to identify Very Small and Small water systems that are likely candidates for interim emergency drinking water funding in Los Angeles County.

The State recognizes the critical capacity issues facing smaller water systems, and developed the Small Water System Program Goal to leverage federal, state, and non-profit resources for bringing these water systems back into sustained compliance. Additional state financial resources for Very Small and Small water systems are guaranteed by the passage of Prop 1 (2014). This Atlas and Policy Guide provides insight into the challenges faced by smaller water systems, and offers a useful framework for needs assessment, policy impact evaluation, and grant tracking for the Small Water Systems Program Goal Implementation Plan.





Very Small and Small Community Water Systems



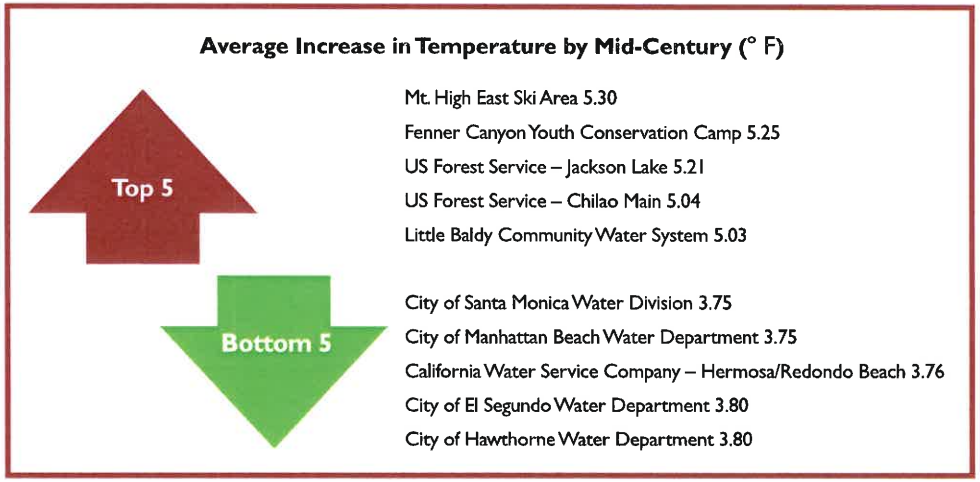
Source: UCLA Luskin Center for Innovation, *see Methodology: "Small Community Water Systems"*

Climate Change: Extreme Heat Days and Increase in Average Temperatures

Increases in extreme heat days and average temperatures are expected statewide by 2050. Climate change will transform California's water resources and the way we consume them. Disruption of the water cycle will ripple through our entire water system, from the vast system of reservoirs and aqueducts of the State Water Project to the many thousand private domestic groundwater wells scattered across the state.[14] The building blocks of our drinking water system, the community water system, will be increasingly challenged to serve clean and affordable drinking water to its customers. This section describes the changing climate in Los Angeles County from downscaled predictions of extreme heat days and average temperature rise.[15]

Extreme Heat Days

Extreme heat days, when surface air temperatures exceed 95° F, are expected to triple from the coast into the inland valleys by 2050. Areas around the mountains are expected to see six-fold increases in extreme heat days.[16] Extreme heat days will intensify the severity of drought. Residential urban water use studies in California show that around 50% of water is used for landscape irrigation.[17] Extreme heat days will increase landscape evapotranspiration rates, or water needed by vegetation, and therefore drive up demand for residential water. Community water systems that serve golf courses, public parks, and cemeteries may find increasing consumption from these water-intensive accounts due to an increase in extreme heat days.

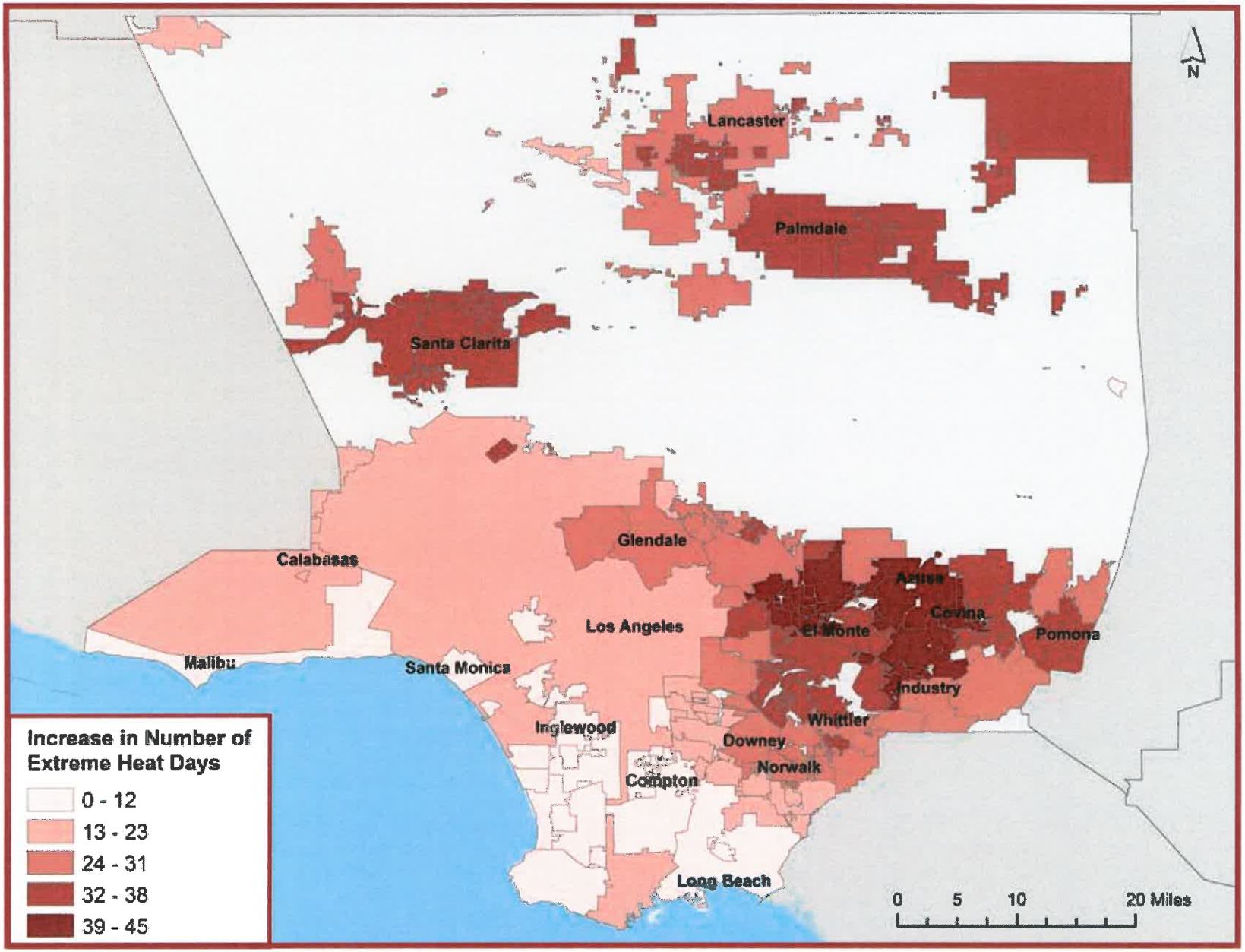


Mid-Century Temperature Rise

In Los Angeles County, climate change projections point to drastic increases in average annual temperatures by 2050. According to these projections, the regional average temperature will rise four to five degrees (Fahrenheit), with the most severe warming in the region's mountains and deserts. As a result of warming, less precipitation may fall as snow and the intensity and irregularity of precipitation may increase, making runoff and stormwater capture more difficult.

By aggregating extreme heat days and temperature rise to the community water system level, this Atlas and Policy Guide describes a future with increases in urban water consumption across all community water systems. Managers of local water systems and state regulators must anticipate the direct and indirect impacts of warming on water resources. This Atlas and Policy Guide points to several of these climate-driven challenges like the increasing cost of imported water supplies and developing high-quality and sustainable groundwater sources. Recognizing the disparities between community water systems in terms of technical, financial, and managerial capacity, it is clear that adapting to climate-driven challenges may be easier for some community water systems than for others.

Increase in Extreme Heat Days by 2050



Source: Sun F, D Walton, and A Hall. 2015. "A hybrid dynamical–statistical downscaling technique, part II: End-of-century warming projections predict a new climate state in the Los Angeles region." Journal of Climate, in press. *See Methodology: "Climate Change"*

Vulnerable Populations Served by Community Water Systems

Vulnerable Populations Served by Community Water Systems
Disadvantaged Communities

The California Office of Environmental Health and Hazard Assessment created a screening tool for identifying communities that face high environmental health risk due to socio-economic status and exposure to air, soil, and water pollution. The California Communities Environmental Health Screening Tool 2.0 evaluated nineteen indicators for every census tract in the state to create a health risk score. Every census tract in the state was ranked by this score to identify communities with the highest environmental health risks. Populations living in census tracts with environmental health risk scores in the top 20% of the state are considered severely disadvantaged communities.

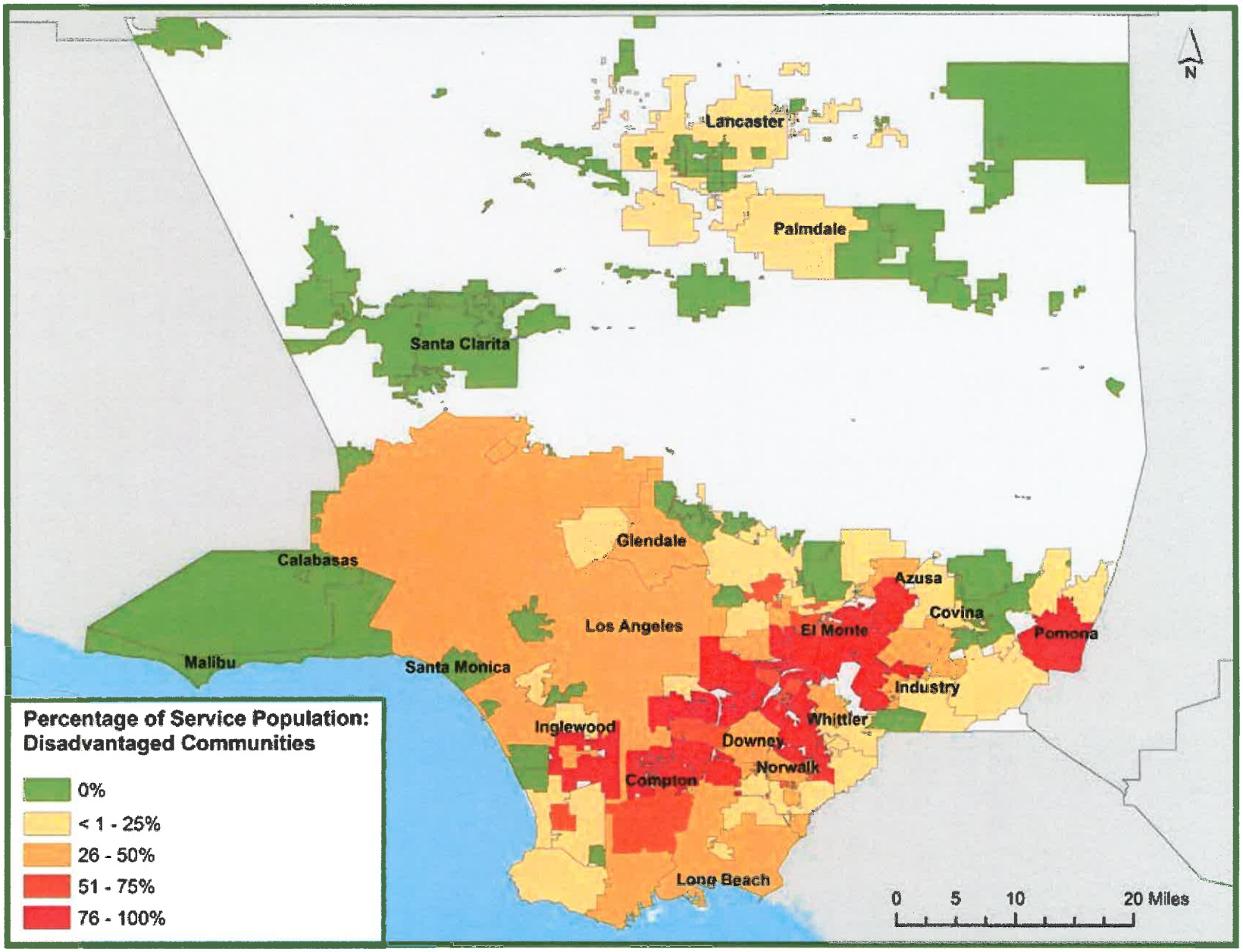
Disadvantaged communities are sensitive populations with low educational attainment, linguistic isolation, poverty, and high unemployment. Curtailment or disruption of potable drinking water supplies requires individuals in households to procure sources of potable water from outside the home. Additional costs are incurred when households must travel to and transport water from a distant location (like a drinking water retail store, water truck, or bottled water from a convenience store). These so-called "replacement" costs represent a significant time and income burden for disadvantaged communities.[18] The population characteristics of disadvantaged communities suggest that they may encounter more obstacles than non-disadvantaged communities when accessing replacement water supplies.

Individuals from disadvantaged communities are more likely to suffer negative health impacts from ingesting quality-impaired drinking water than non-disadvantaged communities. On top of being more susceptible to illness from unhealthy water, disadvantaged communities with low-income, low educational attainment, and high unemployment may also experience difficulty accessing medical care.

More than fifty percent of Californians who live in a disadvantaged community are residents of LA County. Forty-five percent of community water systems in LA County serve disadvantaged communities. Service populations in forty-three community water systems are almost entirely disadvantaged. Most community water systems in LA County with high percentages of disadvantaged communities are Large and Very Large systems, which are concentrated in densely populated areas like South LA, Gateway Cities, and San Gabriel Valley. Because the methodology of the California Environmental Health Screening Tool 2.0 uses census tracts as units of analysis, small rural communities with high environmental health risk are blended into larger population groups, therefore masking their disadvantaged status. The CalEnviroScreen 2.0 dataset may under represent disadvantaged communities in rural areas of Los Angeles County.

Prop 1 (2014) prioritizes disadvantaged communities as recipients of financial assistance for clean, safe, and reliable drinking water. Despite the CalEnviroScreen 2.0 tool, the Department of Water Resources defines disadvantaged communities simply as communities with median household income below 80% of the state's median household income (or approximately less than $49,000). To accurately target communities that are disadvantaged in terms of drinking water access, the state might consider developing additional indicators at the system level. This Atlas and Policy Guide presents indicators for an enhanced definition of disadvantaged communities, like water system size, governance type, and threats and system vulnerabilities faced by community water systems. These indicators may constitute an auxiliary framework for designing a 'water disadvantaged communities' index.

Disadvantaged Communities in Community Water Systems

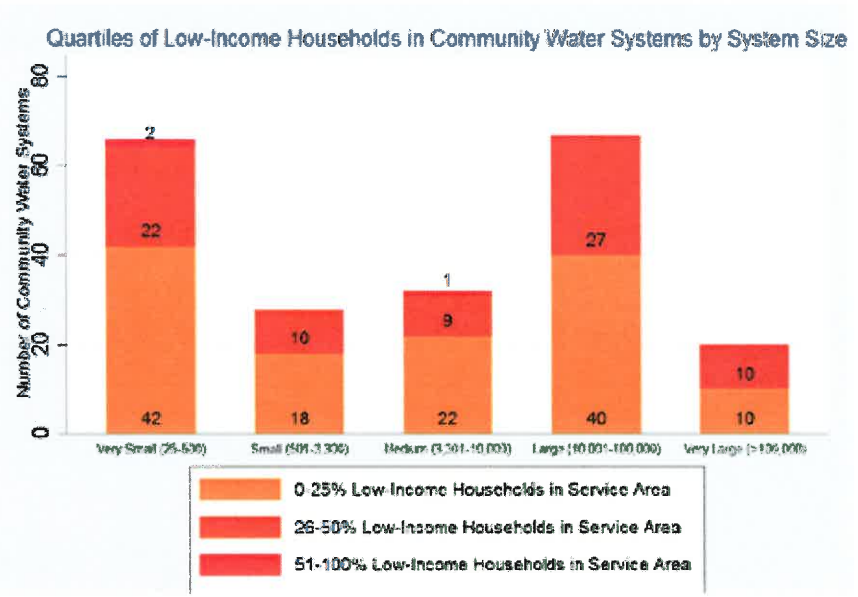


Source: UCLA Luskin Center for Innovation, *see Methodology: "Disadvantaged Communities"*

Vulnerable Populations served by Community Water Systems
Low-Income Households

Community water systems across the country have recently, or are now considering, increasing water rates for residential customers. In the western U.S., this decision is precipitated by several factors including drought, increasing pressure to protect the environment, and increased conservation. Revenue from potable water sales is crucially important to maintaining the essential functions of community water systems and adapting to a changing climate, including developing local water sources to diversify water portfolios, treating contaminated water sources, mitigating environmental impacts, and funding water conservation programs. Managers of community water systems may not know how many of their residential customers are low-income households (defined here as households earning less than $30,000 annually). Low-income households tend to keep annual drinking water charges low by using water primarily for essential indoor uses. Middle and high-income households are likely to spend more on water annually than low-income households, as they tend to use potable water for discretionary purposes like irrigating landscapes.

While increases in water service charges may have little or no impact on water usage in high-income households, the additional cost burden of water charges due to rate increases may constrain even essential uses of water in low-income households.[19] Water rate structures that increase dollar-per-unit costs with the amount of water consumed may keep essential drinking water affordable for low-income households, while discouraging water waste in higher income households. Many Large and Very Large community water systems offer low-income customer assistance programs that reduce the burden of water rates on low-income households. Community water systems are not obligated to provide low-income customer assistance, and these programs are generally administered and funded by local water systems. [20]

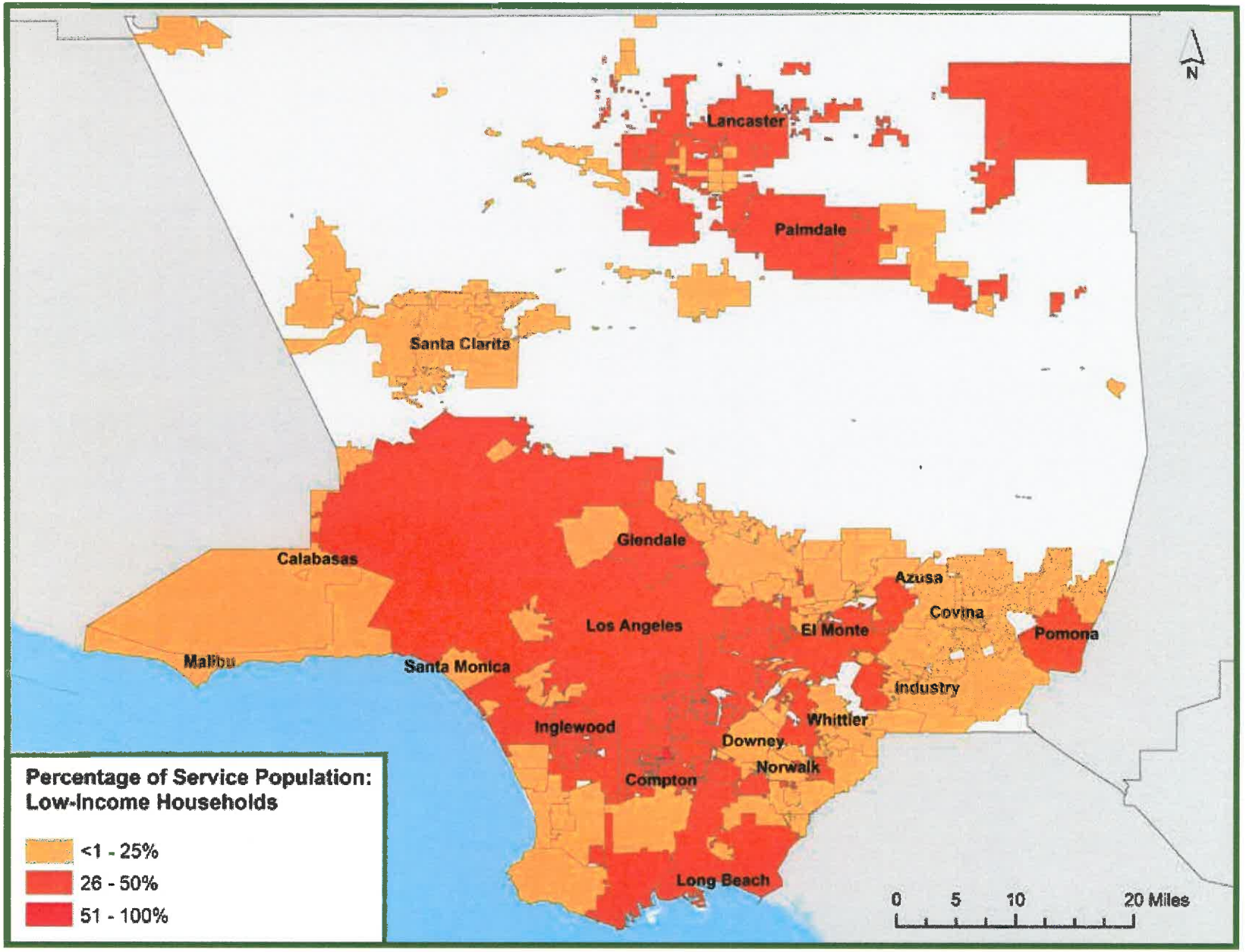


Community Water Systems with Low-Income Households in LA County

This analysis reveals that low-income households are most concentrated in highly urbanized parts of LA County, like the City of Los Angeles, Gateway Cities, and western San Gabriel Valley. Large and Very Large community water systems serve these densely populated areas. This analysis evaluated household income by census block groups. While census block groups have the advantage of being the smallest unit for accurate and timely household income data, they may obscure pockets of low-income households in rural areas served by Very Small and Small water systems. Rural low-income households are blended into larger populations and therefore do not stand out in this analysis.

Community water systems will find that obtaining an accurate understanding of the income levels across residential customer classes is essential for designing sustainable rate structures, conservation strategies, and low-income assistance programs. However, few community water systems have the technical or managerial capacity to perform such analyses at the system level. The spatial overlay methodology applied in this Atlas and Policy Guide has the capacity to generate high-resolution socio-economic characteristics for almost every community water system in the state. At the state level, with the passing of AB 685 in 2012 (the Human Right to Water Bill) regulators will be expected to develop policies and infrastructure projects like the 'Delta Fix' while ensuring that low-income communities have access to affordable water for essential needs. State regulators must understand how large scale water infrastructure investments may indirectly make water more expensive for low-income households. The framework established by this Atlas and Policy Guide series provides a resource for measuring affordability across community water systems.

Low-Income Households Served by Community Water Systems



Source: UCLA Luskin Center for Innovation, *see Methodology: "Low-Income Households"*

Vulnerable Populations served by Community Water Systems
Very Young and Elderly

Children under the age of 10 and adults older than 75 are vulnerable to the adverse health effects from exposure to contaminated drinking water. In young children, early exposure to bacterial or chemically impaired drinking water may adversely impact the development of key functions like immune systems and increase the likelihood of some cancers.[21] Elderly adults may also have compromised immune systems that make them more likely to have existing health conditions that worsen with exposure to contaminated drinking water.

In the event of water curtailments or disruption in service, young children and elderly adults may also face barriers to accessing replacement water. Replacement water is drinking water purchased at a retail vending machine or bottled water purchased from a retail shop, and replaces drinking water that would otherwise come from a household tap. Without assistance from an able-bodied adult, young children and the elderly may not be able to leave the home to acquire replacement water for essential uses like drinking, cleaning, and cooking.

Community Water Systems with Very Young and Elderly populations in LA County

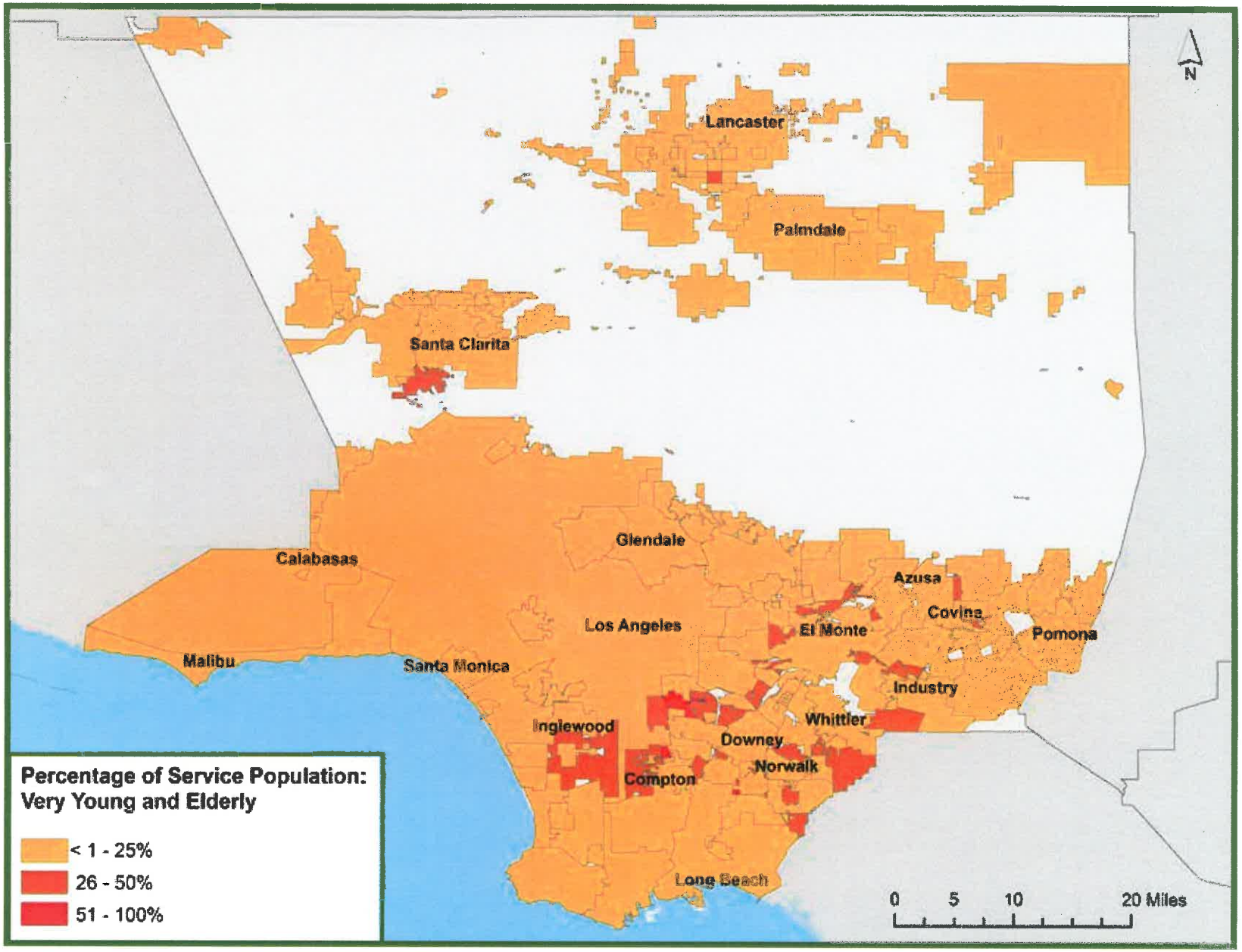
The vast majority of community water systems in LA County have service populations in which up to one in four residents are very young children or elderly. Thirty-one community water systems serve populations in which up to one in two residents are very young children or elderly. The community water systems with above average concentration of young children and elderly residents spans from South LA to Gateway Cities and the San Gabriel Valley.

Drinking water quality standards, developed by federal and state regulators, must take into account the health risk of contaminants on very young and elderly populations. As research related to drinking water quality standards progresses, community water system-level information on young and elderly residents may help guide policymakers in determining the extent of potential public health threats. At the local level, community water system managers may use the methodology applied here to identify portions of their water system that serve many very young and elderly residents. Water managers may then anticipate the need for emergency replacement water and health services in the result of sudden water quality impairment or shortages.

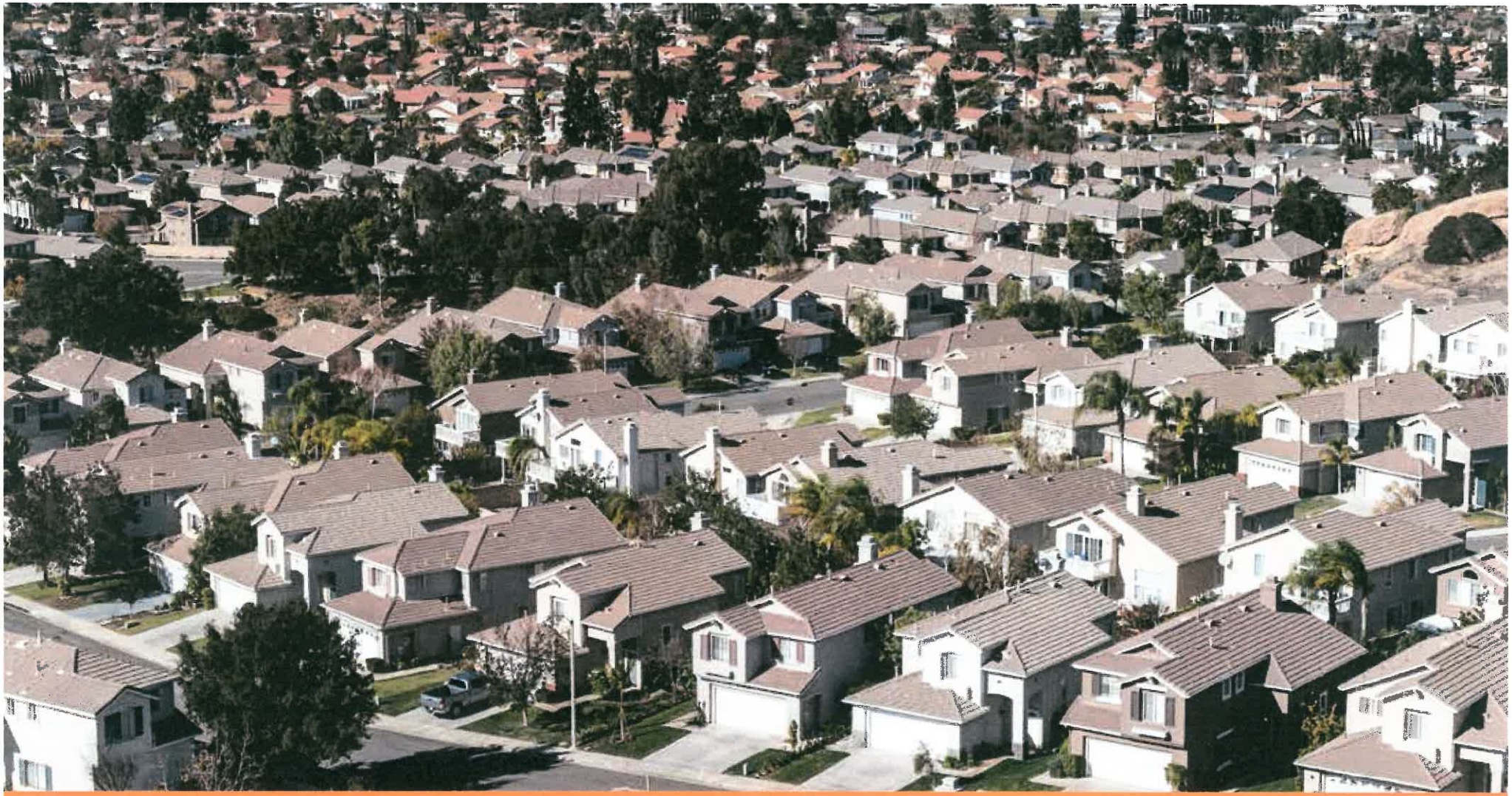
Top 5 Community Water Systems with High Concentrations of Very Young and Elderly Populations

1. Maywood Mutual Water Company No. 1 (68%)
2. Bellflower Home Garden Water Company (65%)
3. City of Huntington Park Water Department (62%)
4. Golden State Water Company Willowbrook (58%)
5. Golden State Water Company Bell, Bell Gardens (50%)

Very Young and Elderly Residents in Community Water Systems



Source: UCLA Luskin Center for Innovation, *see Methodology: "Very Young and Elderly Populations"*



The Built Environment and Water Use

Housing Tenure and Type

Community water systems have several tools for encouraging water conservation and efficiency within their customer base. These tools may consist of price-based incentives, rebates for water efficient landscapes, and assistance for purchasing water-efficient appliances and plumbing fixtures like low-flow faucet heads. The residential tenure (rent vs. own) and type (single-family unit vs. multi-family unit) of water customers may be a key determinant of the effectiveness of conservation and efficiency programs. Price-based incentives, which use the cost of water service to achieve desired conservation outcomes, are increasingly popular in California. The implementation and effectiveness of price-based incentives, however, may be a function of demographic and other household characteristics.

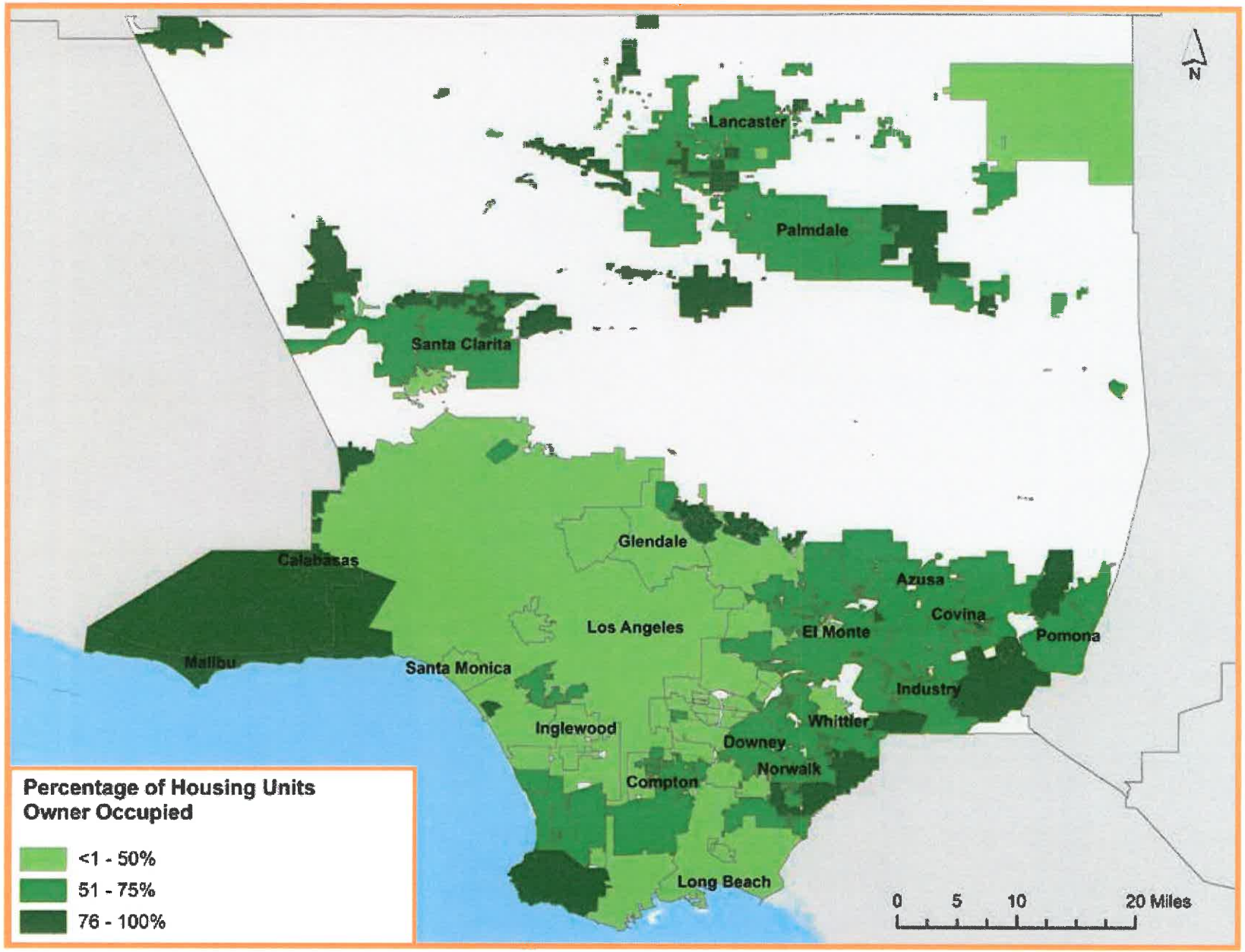
Sensitivity to Water Prices

Conservation pricing is a method for structuring the cost of water service in a way that increases the volumetric price of water as total consumption increases. Depending on the price points used to structure the rates, the increased cost of water service may induce high-use households to reduce consumption. The effectiveness of conservation pricing schemes is heavily contingent on whether or not the water user is responsible for paying the water bill. An owner-occupied single-family household in a Large or Very Large community water system is likely to have metered water service that is paid by the owner of the home. These households may be the most sensitive to changes in water price. Residents that rent units in multi-family housing are less likely to have individual accounts with community water systems, and may not be sensitive to price-based conservation and efficiency strategies.

Household water consumption may also vary by household size, income, race, and lot size. Some innovative community water systems have developed water rates that are adjusted to individual household needs, incorporating lot size and family size into a household water budget. This type of data-driven rate system will be the most effective in both protecting the affordability of essential water use and discouraging water waste. Unfortunately, few community water systems have the resources to develop customer-level data and models needed to implement water-budget based rates.

This analysis provides an example of how U.S. Census data can be used to assess system-level household characteristics that help identify opportunities for price-based conservation strategies. Though this analysis looked only at housing tenure and type, additional variables like household income, household size, and lot size may also provide useful policy dimensions. As we learn more about the effects of housing type, tenure, and other household variables on water use patterns, community water system managers may use the methodology presented in this report to evaluate the potential for conservation pricing strategies in their service areas.

Owner-Occupied Housing Units in Community Water Systems



Source: UCLA Luskin Center for Innovation, *see Methodology: "Housing Tenure"*

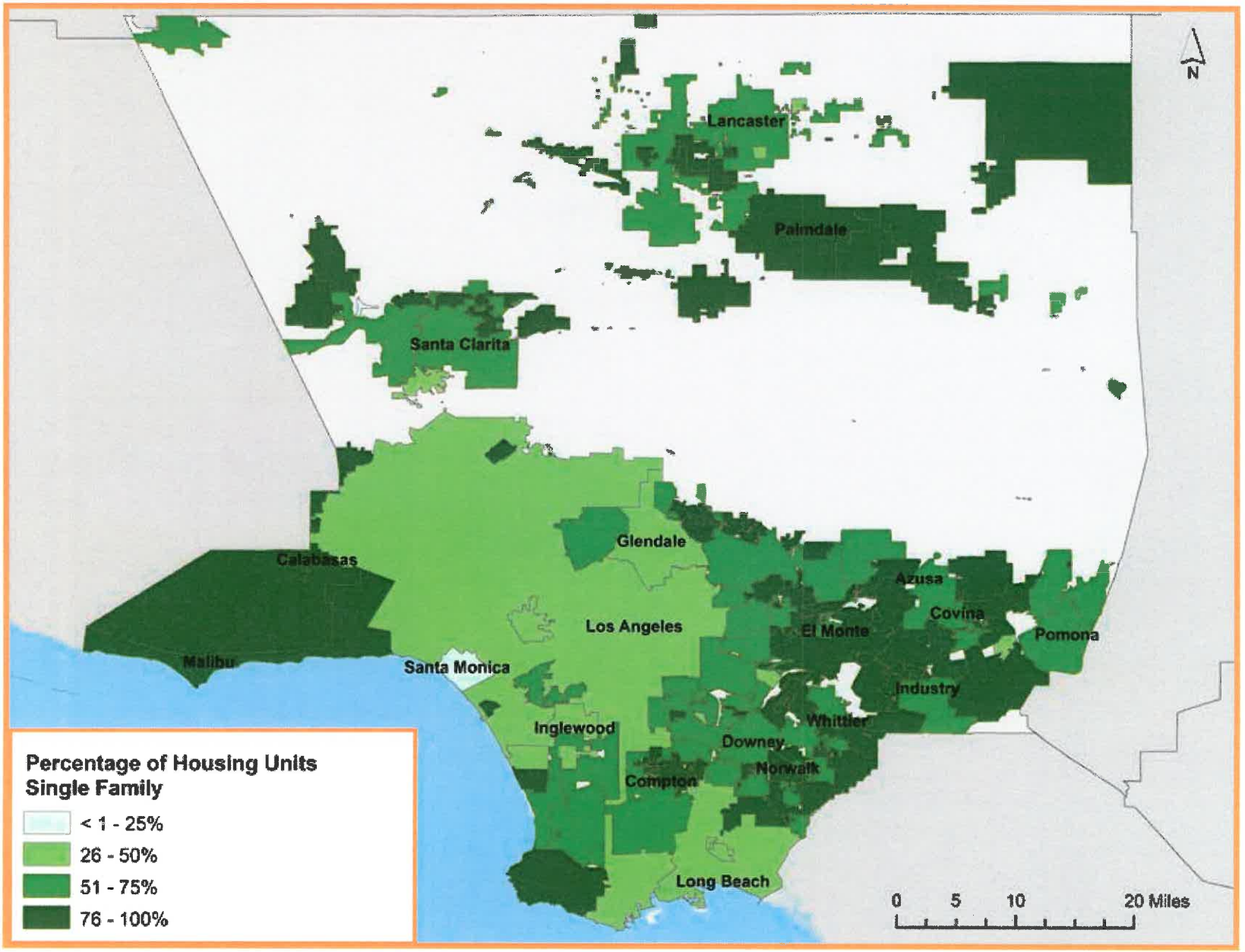
Property Management: Lawns and Landscapes

Over half of residential water consumed in the state is for watering lawns and landscapes. Some community water systems will subsidize the cost of transforming a water-intensive lawn into a drought tolerant landscape, as reducing the water used for irrigating lawns increases the available supply for essential uses like drinking water. This type of conservation program works best when the ratepayer also controls the irrigation of landscaping on the property. Owner-occupied single-family households are likely to both pay a bill for water service and irrigate a landscape on their property, and would be an excellent target for landscape replacement programs. On the other hand, renters in multi-family housing may have no control over the irrigation and maintenance of landscaping, and thus are not the most effective target for lawn replacement incentives. While many multi-family housing complexes are landscaped, residents rarely have a say in landscaping matters. Therefore, local water utility managers might also provide landscape replacement education and outreach to condominium associations and multi-family building managers.

Housing Tenure and Type in Community Water Systems Serving LA County

Among community water systems serving LA County, the highest concentration of single-unit housing and owner-occupied housing is in the eastern edge of the San Gabriel Valley near Orange County, Las Virgenes, and the suburbs around Santa Clarita, Lancaster, and Palmdale in the northern region of the County. As described in the Threats and System Vulnerabilities section of this report, many of these community water systems are also predicted to experience the largest increases in average temperature and extreme heat days of any systems in the County. Community water systems in those regions with high percentages of owner-occupied single-unit housing are strong potential markets for landscape replacement incentives and where these programs may have the highest impact on water efficiency. At a higher resolution, larger municipalities like the City of Los Angeles may have significant clusters of owner-occupied and single-unit housing, which can be evaluated on a block by block basis using tax assessment data.

Single Housing Units in Community Water Systems



Source: UCLA Luskin Center for Innovation, *see Methodology: "Housing Units"*

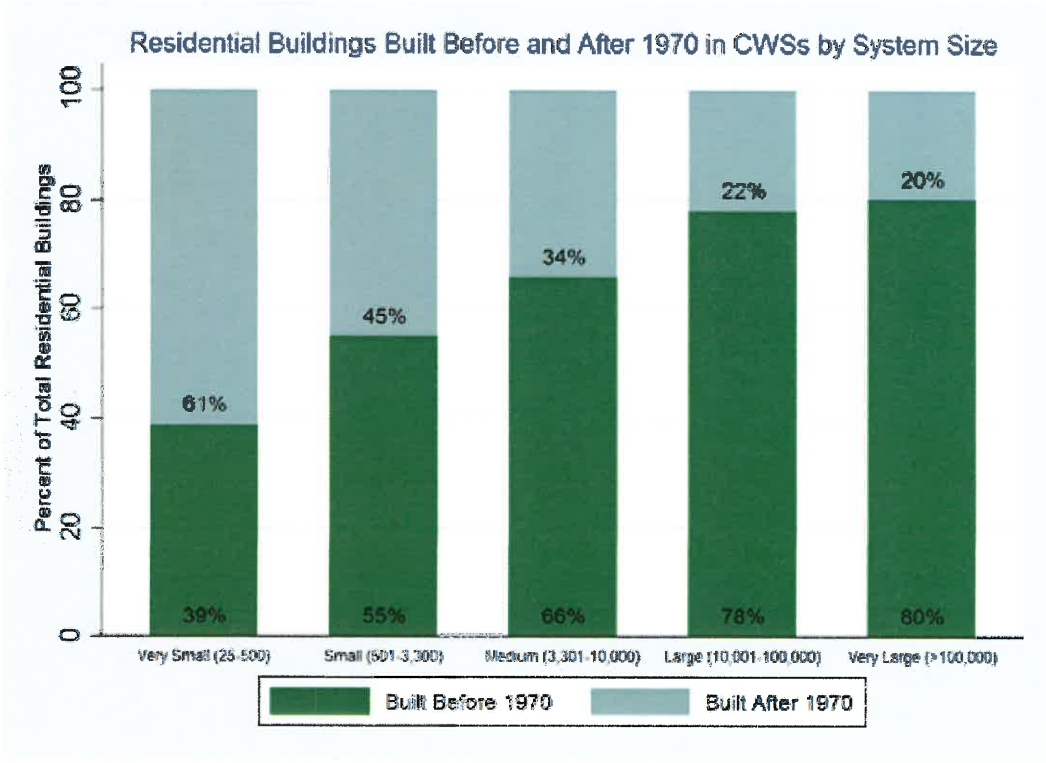
Built Environment Influences on Opportunities for Conservation

State regulations requiring water efficient plumbing fixtures for new development and water-sensitive building codes resulted in sustained improvements to residential water efficiency over the last several decades. Recently built single-family houses and multi-family complexes are likely to use less water than older structures of comparable size. Each year, community water systems in California spend millions of dollars on incentive programs designed to replace inefficient plumbing fixtures and appliances in households. The built environment may serve as an excellent indicator to guide the marketing of these incentives. This Atlas and Policy Guide presents the distribution of building ages for each community water system in LA County. This knowledge may help water managers target older residential buildings with incentives to replace plumbing fixtures with low-flow shower heads and faucets, and purchase water-efficient washing machines. An in-depth study of household water consumption and building age will validate these assumptions, and inform best practices for household water conservation incentives.

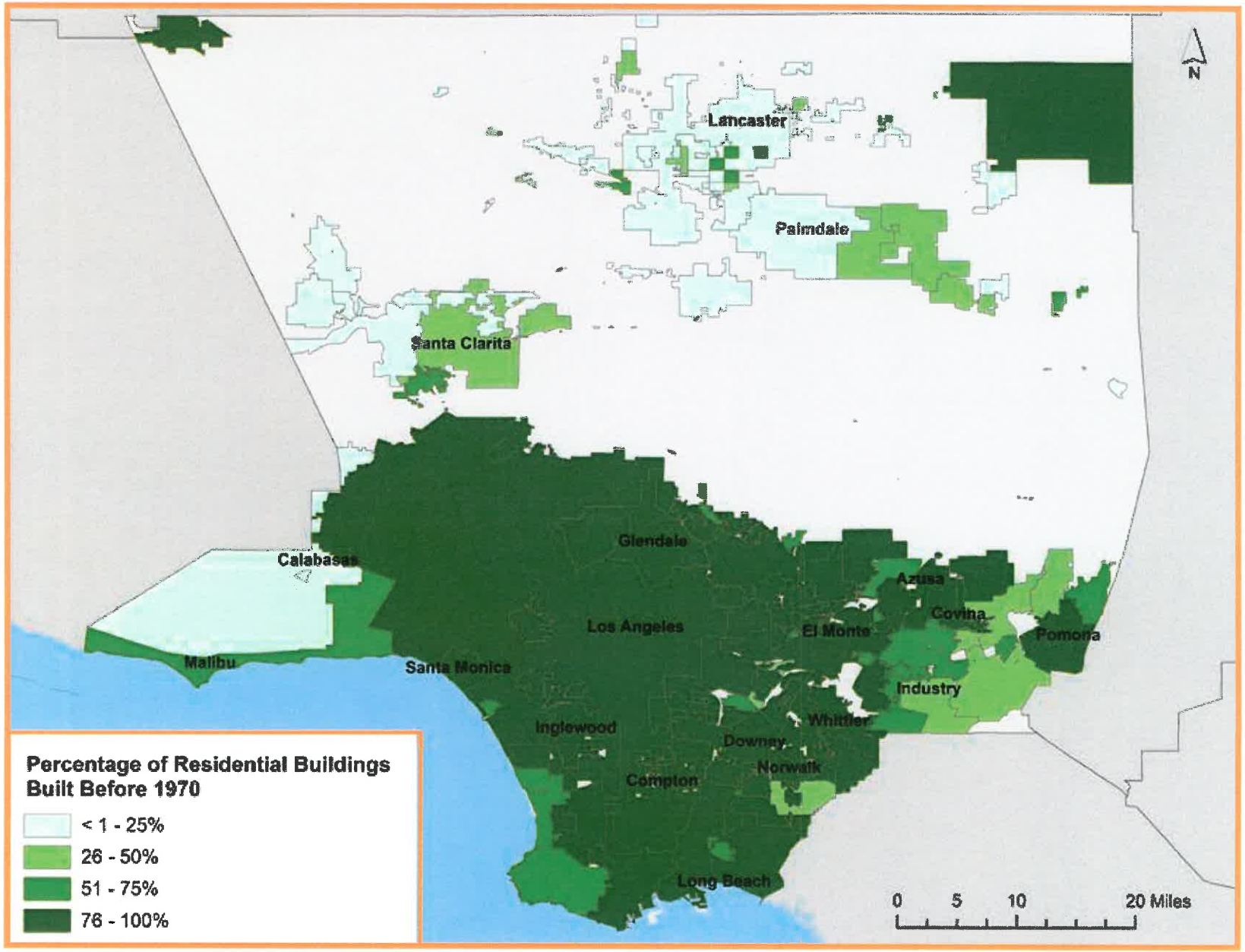
Residential Building Age in Community Water Systems Serving LA County

Some community water systems serving Los Angeles Basin have very high percentages of residential buildings built before 1970. These are some of the older urban settlements in the region, with building stock dating back to the late 19th and early 20th century. Areas of the County that grew rapidly in the 1980s and 1990s, including Santa Clarita, Lancaster, Palmdale, and the eastern edge of San Gabriel Valley, have much higher concentrations of post-1970s housing stock.

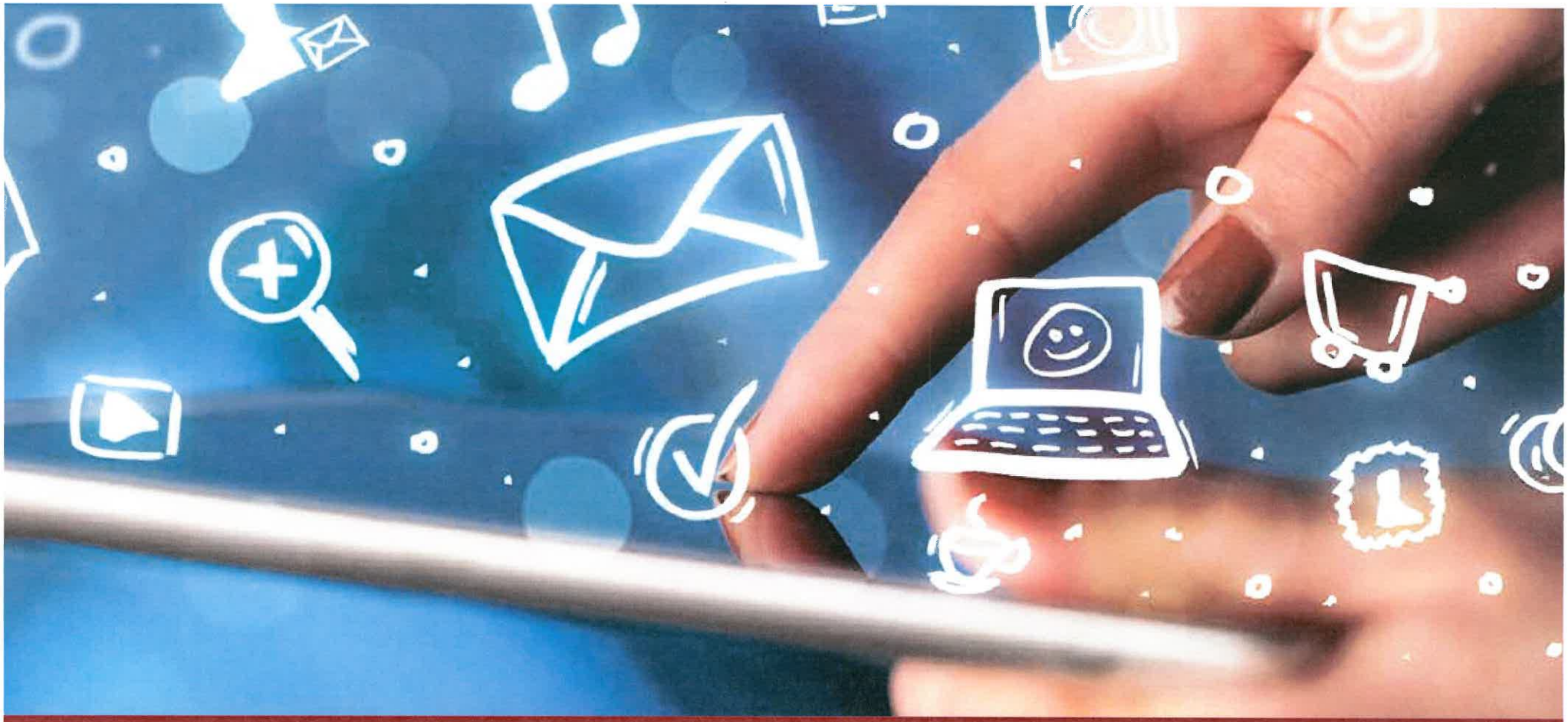
California state regulators may also benefit from a more nuanced understanding of building age across community water systems. The state's 1992 toilet retrofit laws, 2010 Model Water Efficient Landscape Ordinance and 2011 Cal Green Building Code are expected to increase urban water efficiency over the long run. The system-level built environment characteristics presented in the Atlas and Policy Guide may be compared to rebate penetration rates to understand whether the areas of highest potential (community water systems with older building stock) are being reached by these programs.



Residential Buildings Constructed Before 1970



Source: UCLA Luskin Center for Innovation, *see Methodology: "Building Age"*



Public Access to System Information

Accessibility to Critical Customer Information

Water systems' provision of information to their customers is an important factor in influencing household water use behavior, providing the necessary information for households to make important consumption decisions, manage their water expenditures, invest in water conservation, and become aware of key changes in state policy.[22] We report on the variation in the quantity and quality of information provided by individual systems. We use the maintenance of a publicly-available website as our key metric for evaluating system performance. We also discuss the type of information provided by system websites, including drought alerts, conservation rebates, pricing and needs-based assistance across systems.

Prevalence of Public Website

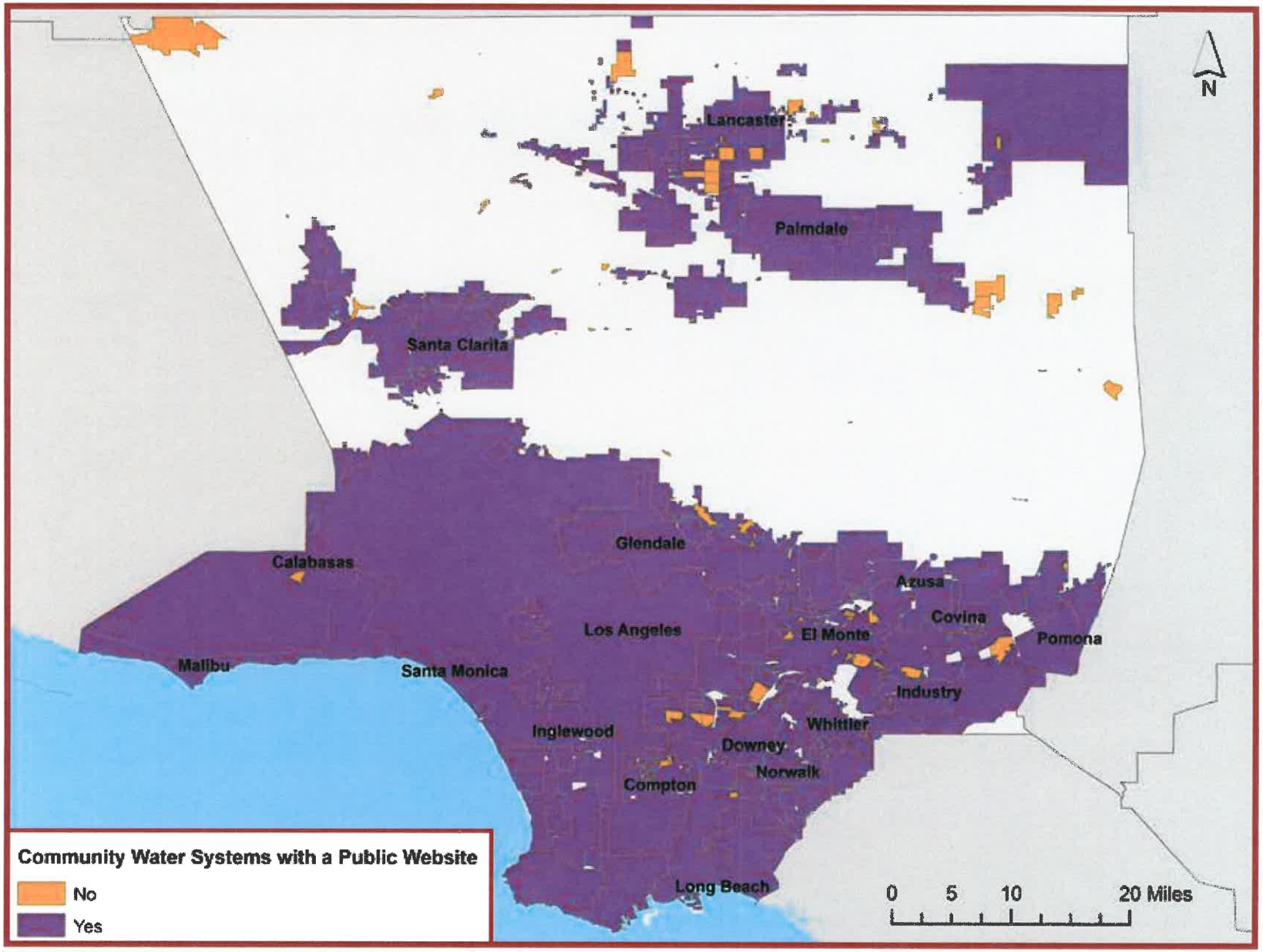
Given the dynamic pace of water policy changes, access to information about water quality, water prices, supply conditions, drought, and governance is most easily distributed to customers using the internet. Community water system websites should serve as comprehensive portals for important water service information. We were able to identify the existence of a publicly-available website maintained by only 128 of the 213 LA County community water systems.[23]

Systems lacking a website, however, were much more likely to serve very small or small populations, which is why the map on Page 6 appears to show LA County being served overwhelmingly by water systems with websites. Systems lacking a website also had a lower-income customer base, and were much more likely to be managed by a private company than systems with a website. Systems without a website were also much less likely to provide conservation rebates and low-income customer assistance.

Information: Pricing, Conservation and Low-Income Assistance

Websites may provide relevant information on pricing and the ability to pay bills, conservation tips and opportunities, and low-income assistance programs. The table below summarizes the proportion of systems in LA County which provide each of these types of information to their customers via a website. System websites could also post up-to-date notices regarding California's rapidly- evolving water laws and policies in the current state of emergency management.[24] Every community water system is nominally required to retain data on each of these components and report on their performance to the state water board, although in practice not all systems do so. Whether systems provide this information on a publicly-available website reflects how organized and accountable systems are to their customers. Providing comprehensive customer information online can also save systems money by reducing the need for expensive mailing and public advertisement campaigns to customers. Maintaining a website will only become more important as the ubiquity of internet use increases among system customers.

Community Water Systems with a Public Website



Source: UCLA Luskin Center for Innovation, see "Methodology: Public Access to System Information"

Types of Information Provided on System Websites

Pricing and Online Payment

Information/Opportunity Provided on Website	Among Systems that Maintain a Website	Among all Systems
Consumption prices	83%	48%
Ability to pay online	80%	47%
State drought announcement	70%	41%
Water conservation advice	86%	50%
Water conservation rebate program	77%	45%
Low-income customer assistance program	38%	22%

Of the LA County systems that maintained websites, eighty percent published the price of water service to consumers. The structure of prices for different levels of water consumption may be complex and not easily communicated over the phone. Viewing pricing information is thus a primary motivation for households to visit a system website, as this data is only otherwise available in a mailed customer bill. 80% of systems also provide customers with the opportunity to directly pay their water bill through the system website. Online payment is easier both for water systems and for customers. The ability to pay online may also incentivize more customers to visit system websites, and consequently view other important messaging such as conservation techniques or opportunities, or low income customer assistance programs.

Drought and Conservation Awareness

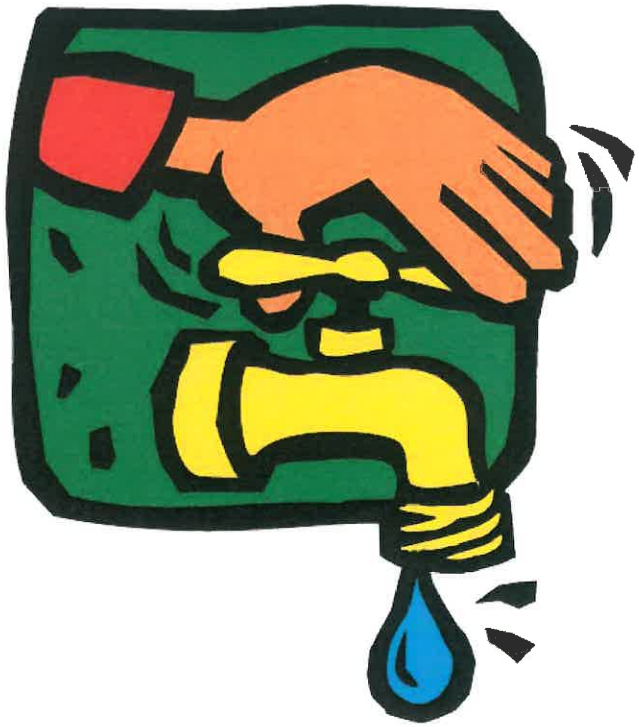
Households may become aware of the state-wide drought, and consequently be motivated to conserve water, through sources other than their community water system.[25] Households are in fact more likely to learn about state-wide drought developments through mass media, neighbors or friends. Nevertheless, system websites serve as an important and detailed source of more drought information[26] that affects their individual water access, including the risk of fines for excessive use. 70% of system websites in LA County provided information announcing current statewide drought measures and use restrictions.

Even more systems with a website— nearly 90%— provided tips to households on how to use less water. System websites are likely to play a large role in providing information and influencing the uptake of conservation strategies. Perhaps more importantly, individual water systems are usually the only source of specific information for households to take advantage of rebate opportunities to ease the cost of implementing conservation technologies. Almost 80% of system websites in LA County provide specific information regarding water conservation rebate programs.

Low-Income Customer Assistance

Water systems are also the only entities which provide a direct subsidy for household drinking water consumption. Yet less than 40% of system websites state that they maintain low-income customer assistance programs. This represents less than half the proportion of systems that offer a subsidy for water conservation. While questionable in terms of equity, the greater prevalence of system conservation rather than low-income assistance programs is logical in the current state policy framework. Water systems have traditionally been tasked with prioritizing water resource management, rather than addressing issues of customer affordability, by state regulatory authorities.

Save Our WATER



Water Conservation Programs

Water Conservation Programs

Systems which maintain publicly-available websites are much more likely to offer conservation rebates.

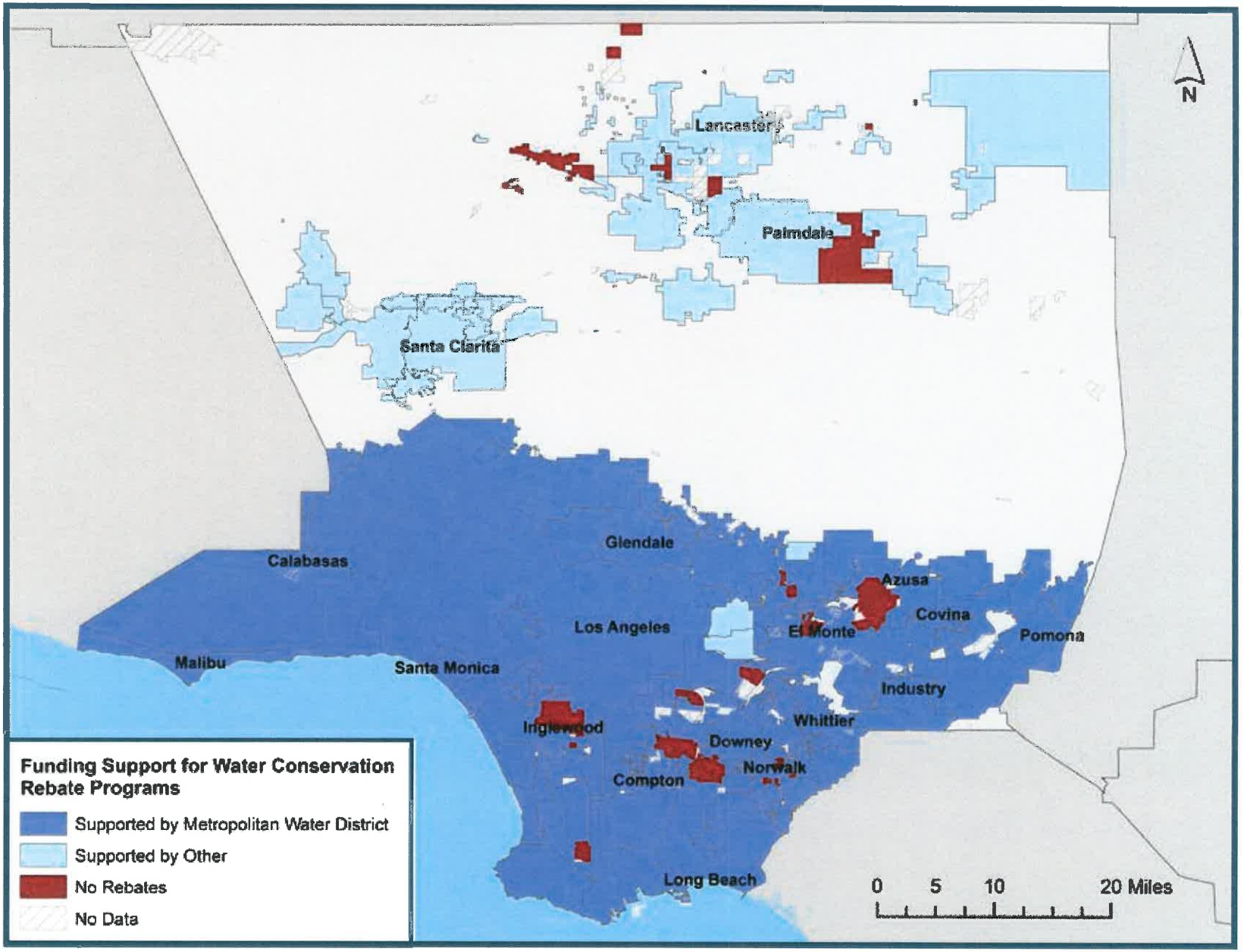
Conservation rebates are financial incentives provided to customers which encourage them to use less water. Community water systems offer rebates to households in exchange for the installation of indoor technological advances such as water efficient appliances or low flow plumbing devices, or outdoor strategies such as efficient, sprinkler systems, soil moisture sensors, drought-resistant landscaping or rain collection barrels. Household adoption of these tools reduces water usage and thus the burden on the water system at large. These rebate programs are funded by individual water systems, or with support from water wholesalers or other public agencies. In Los Angeles County, the Metropolitan Water District of Southern California provides funding support to many larger community water systems— which are its member agencies. Funding may also be available for water systems to support rebate programs for customers through the state's new Water Energy Technology Program, which is jointly run by several state agencies and supported by the Governor's Office of Planning and Research and CalEPA.[27]

Rebate and Incentive Programs Offered

The conservation measures incentivized by water system rebate programs range from small changes to indoor appliances — installing a low-flow showerhead— to overhauling a residence's outdoor space through xeriscaping. Most rebates cover a percentage of the customer's initial cost outlay for a given water-saving device, but also save consumers money in the long-run by reducing their water use. The typical percentage rebate offered to incentivize the adoption of a conservation strategy varies widely, from nearly the entire cost of sprinkler heads to a small fraction of the cost of a new washing machine.

We identified 100 systems that offered rebates within LA County. Systems which maintain publicly-available websites are much more likely to offer conservation rebates. Whereas more than 75% of systems with websites offer rebates, less than 10% of other systems did so. The range of rebates offered does not typically vary by the size of the system; systems tend to offer either a large number of conservation incentives or none.

Funding for Water Conservation Rebate Programs



Source: UCLA Luskin Center for Innovation, see "Methodology: Water Pricing, Cost and Affordability"

The expansive outlay of water-saving options offered by many systems with rebates, however, largely reflects the support of the Metropolitan Water District rather than individual systems' initiative. The district offers a suite of rebates via a program called SoCal WaterSmart. More than 75% of all systems that offer rebates are supported by MWD, including nearly all systems in the southern half of Los Angeles County.

Ease of Enrollment

In addition to providing information on water conservation rebates, the extent to which systems make enrollment in these programs easy is an important factor in uptake. Community water systems in Los Angeles provided two different means to enroll. Households can either download an application from the internet and send it via U.S. mail to the system's billing office, or complete enrollment online. About one fourth of systems only allowed for mail-in enrollment. Some rebates (ie, showerheads) simply required proof of payment whereas others (ie, turf removal) require proof of implementation. In either case, verification of the use of the conservation technology occured once at most.

Rebates and Vulnerable Populations

Across the state, low-income households face several barriers to access conservation rebates. First, they may be more likely to be serviced by systems that do not offer rebates. Second, even if rebates are offered, low-income customers cannot easily take advantage of the more substantial water-saving technologies because they do not have the cash on hand required to make large household investments. Third, they are less likely to learn about rebate opportunities if these opportunities are promoted by systems only in English.

Moreover, in urbanized counties such as Los Angeles, much of the low-income population resides in multi-family housing.[28] While precise data is not available, we know that residents of multi-family housing often do not pay for water service directly. Rather, the cost of water service is included in the price of rent and landlords directly interact with the water system. In this case, multi-family housing occupants are not eligible to enroll for rebates and thus do not have a direct incentive to conserve or reduce their use. Instead, the incentive to apply for and benefit derived from rebates lies with apartment managers or landlords.

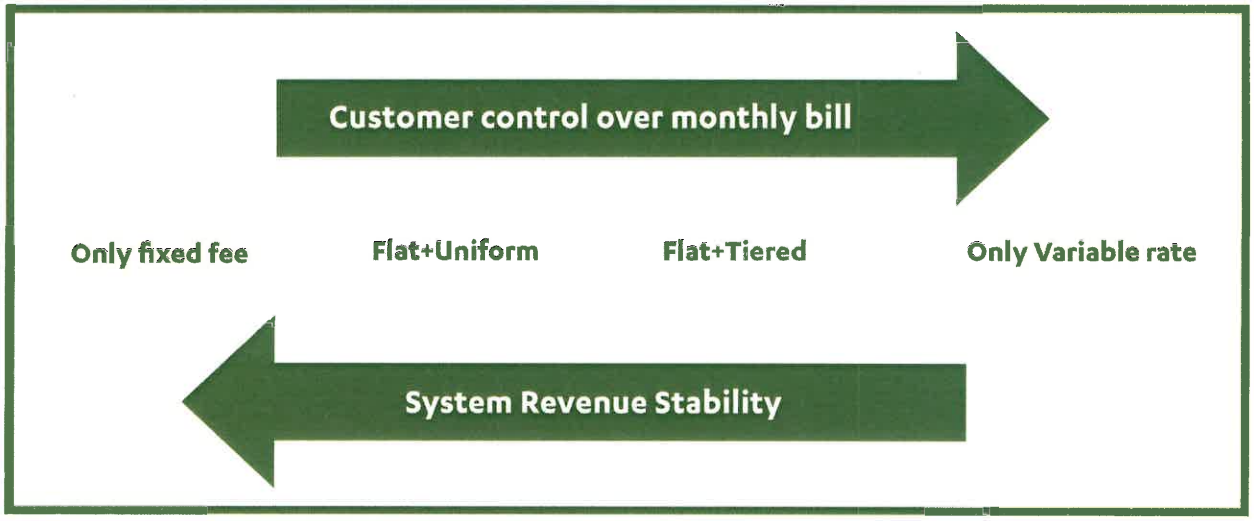
Water Pricing, Cost and Affordability

The cost of water paid by households reflects the quantity of water they use for indoor and outdoor purposes multiplied by the price of water set by their water system. Water's price in turn affects households' incentive to conserve water, interest in conservation rebates and needs-based assistance programs and measures of affordability.[29] Water service is generally defined as affordable if its cost does not exceed a certain percentage of household income, between 1.5% and 3%.

Structure of Water Prices

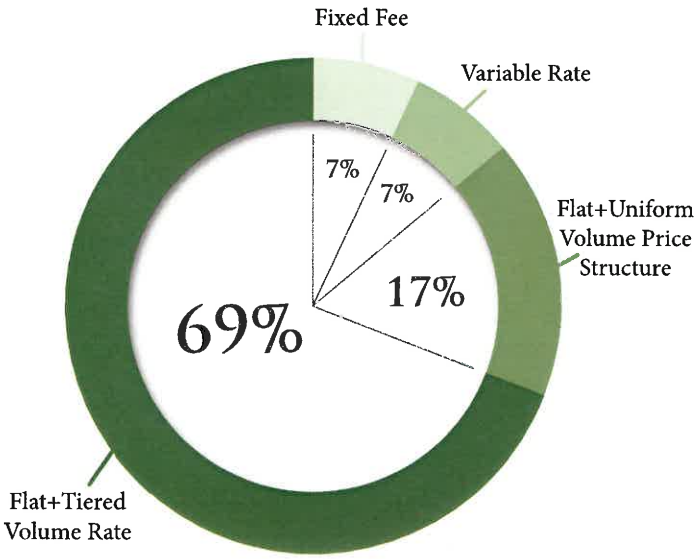
Water system managers and their customers often have different preferences for pricing structures. Water system managers may prefer structures that yield revenue stability in the face of drought or consumption shocks. Customers may prefer a price structure that enables them to decrease their water expenditure by reducing their water consumption.

There are four general types of water price schemes: only fixed fees, fixed fee + uniform quantity rates, fixed fee+ tiered quantity rates, and only variable rates (which may be either uniform or tiered based on quantity thresholds). An exclusive fixed fee charges customers the same amount regardless of how much water they use. Such a fixed fee presents the most revenue stability for water systems but does not incentivize conservation and does not enable customers to adjust expenditures by altering water consumption. On the other hand, an exclusively variable rate charges customers exactly in proportion to how much water they use. While such a variable rate offers customers the largest opportunity to reduce their water cost by as much as they can reduce consumption, it also introduces greater revenue uncertainty for water systems.



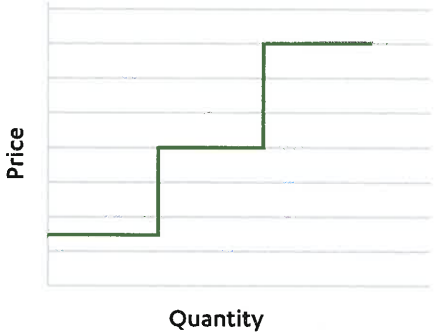
Most water systems in LA County compromise between these two extremes. They charge customers a fixed fee untied to consumption to ensure some revenue stability, and an additional variable rate to give customers the opportunity and incentive to conserve water. The variable rate may be uniform or tiered, with best practice dictating that tiers increase the unit rate as customers pass certain consumption thresholds. This is commonly called an increasing block tariff structure. Most systems also design different tier thresholds for different classes of customers, such as single family residential, multi-family residential, commercial and industrial, to reflect their different expected reasonable use levels. Fixed costs represent 33% of the average water bill for customers across systems in LA County, and overall cost is fairly consistent regardless of whether systems employ flat+uniform or flat+tiered volume structures.

Water Systems Pricing Models



Of the 115 systems for which we have pricing data, 7% only apply a fixed fee. Another 7% of systems take the opposite approach; they only employ a variable rate, with no fixed fee. More commonly, 17% of systems employ a flat +uniform volume price structure, and 69% of systems employ a flat + tiered volume rate. While uniform and tiered variable rates impose a similar cost burden on the average customer, this similarity masks the vastly different incentives that these structures offer to customers, and the welfare implications of imposing such price structures on the majority of households which deviate from the average consumption level in California.[30] There is a growing consensus that the best practice for water system pricing is a carefully-designed increasing block tariff structure that also ensures affordability for low-income customers.[31] The use of this pricing structure by water systems, however, is actually under threat across the state due to a recent court ruling on Proposition 218.[32]

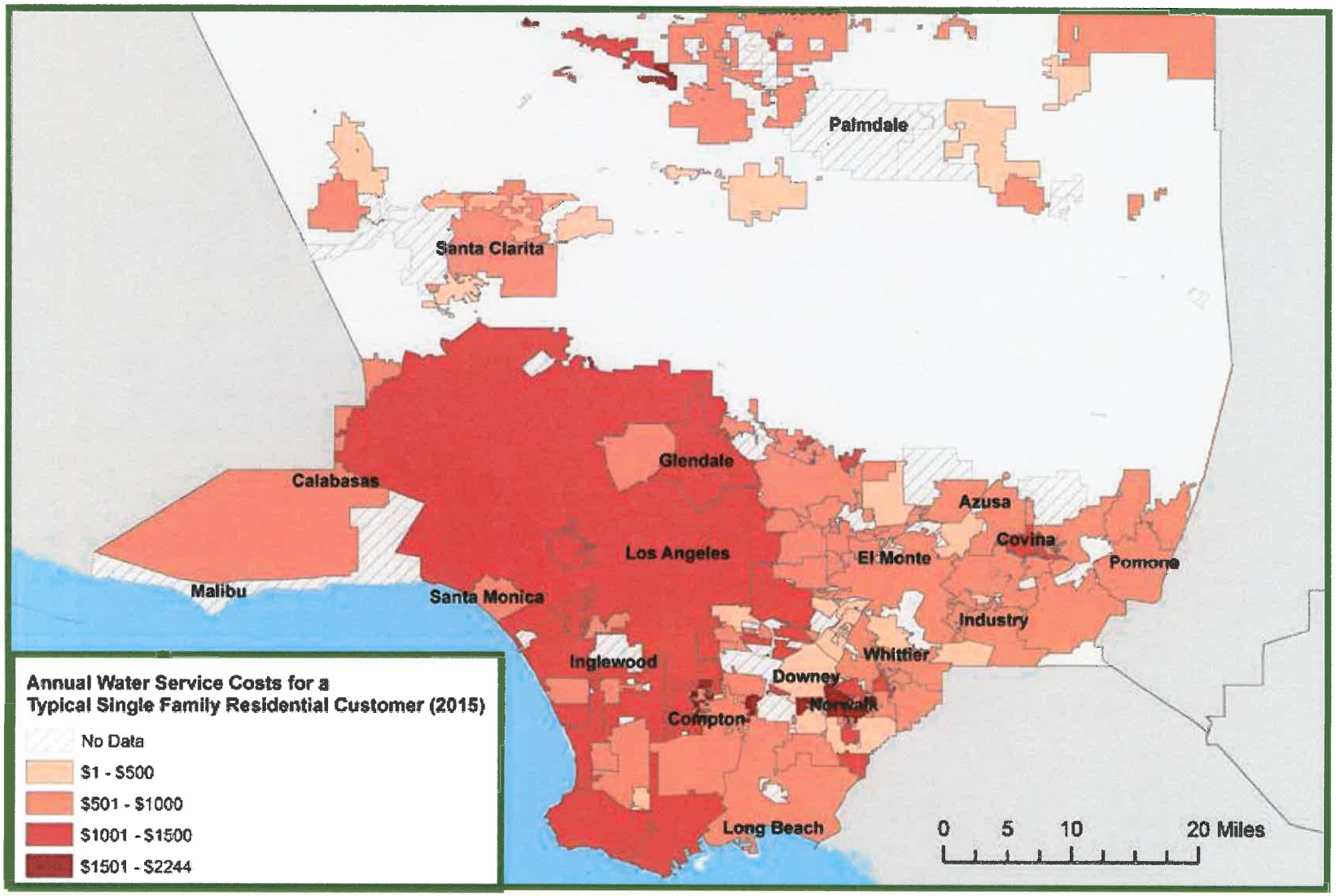
Increasing Block Tariff Structure



Average Cost of Water Service

As more fully detailed in the Methodology section of this report, we calculate the average cost of water service for customers in each water system for which we have data in Los Angeles County by using an average consumption estimate for single-family residences and applying the different price structures employed by each system.[33] The average annual cost to single-family residential customers at the system level was $814. The cost for the same quantity of water across systems varied widely, however, from $145 charged by the Maywood Mutual Water Company to $2214 charged by the California Water Service Company in Lake Hughes.

Annual Water Service Cost for a Typical Single Family Residential Customer (2015)



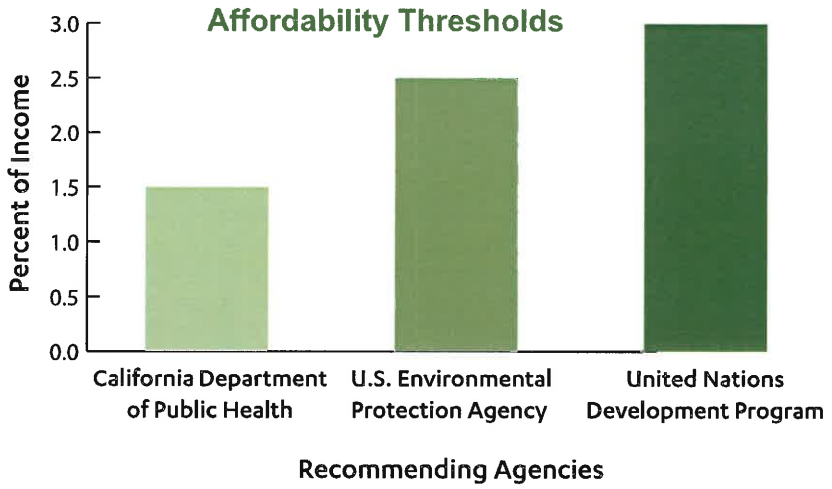
Source: UCLA Luskin Center for Innovation, see "Methodology: Water Pricing, Cost and Affordability"

Income, Disadvantage and Water Service Affordability

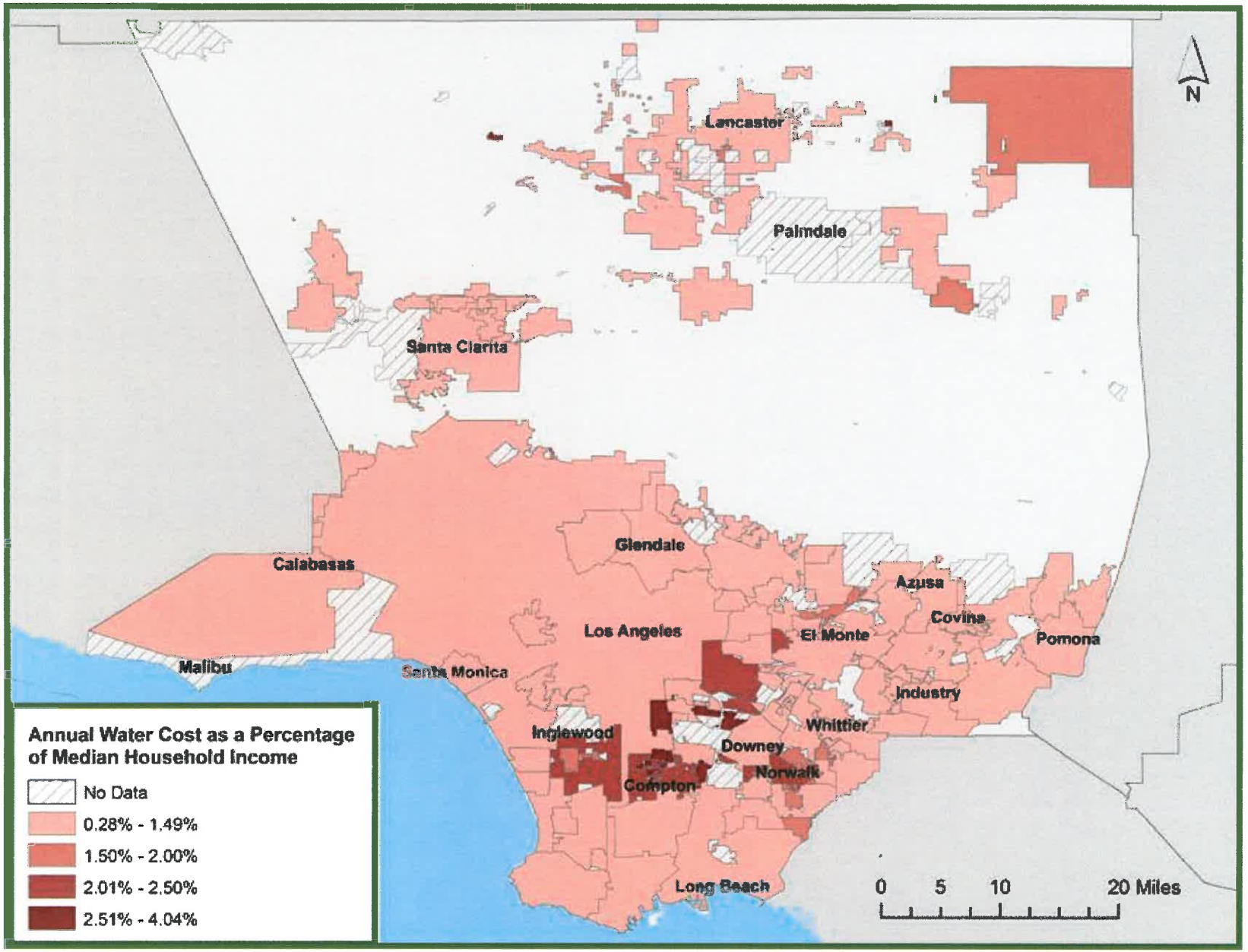
The California Department of Water Resources and the State Water Resources Control Board define a disadvantaged community as a community with median household income equal to or less than 80% of statewide median household income (approximately $48,706).[34] Nearly 50% of all water systems in Los Angeles County, serve at least one disadvantaged community within their boundaries, and nearly 25% of entire system populations have a median income below the threshold for defining a disadvantaged community.

Water cost is a function of the price of water and the amount of water consumed. Affordability is universally determined by whether water cost exceeds a certain percentage of income, but there is not agreement over the affordability threshold.[35] While the California Department of Public Health recommends 1.5% of annual household income as a maximum affordability threshold, the U.S. Environmental Protection Agency EPA suggests a threshold of 2%-2.5% of income, and the United Nations Development Program recommends a maximum of 3%.[36] The determination of an affordability threshold is not just an academic exercise; thresholds are used by systems to determine customer eligibility for needs-based assistance programs.

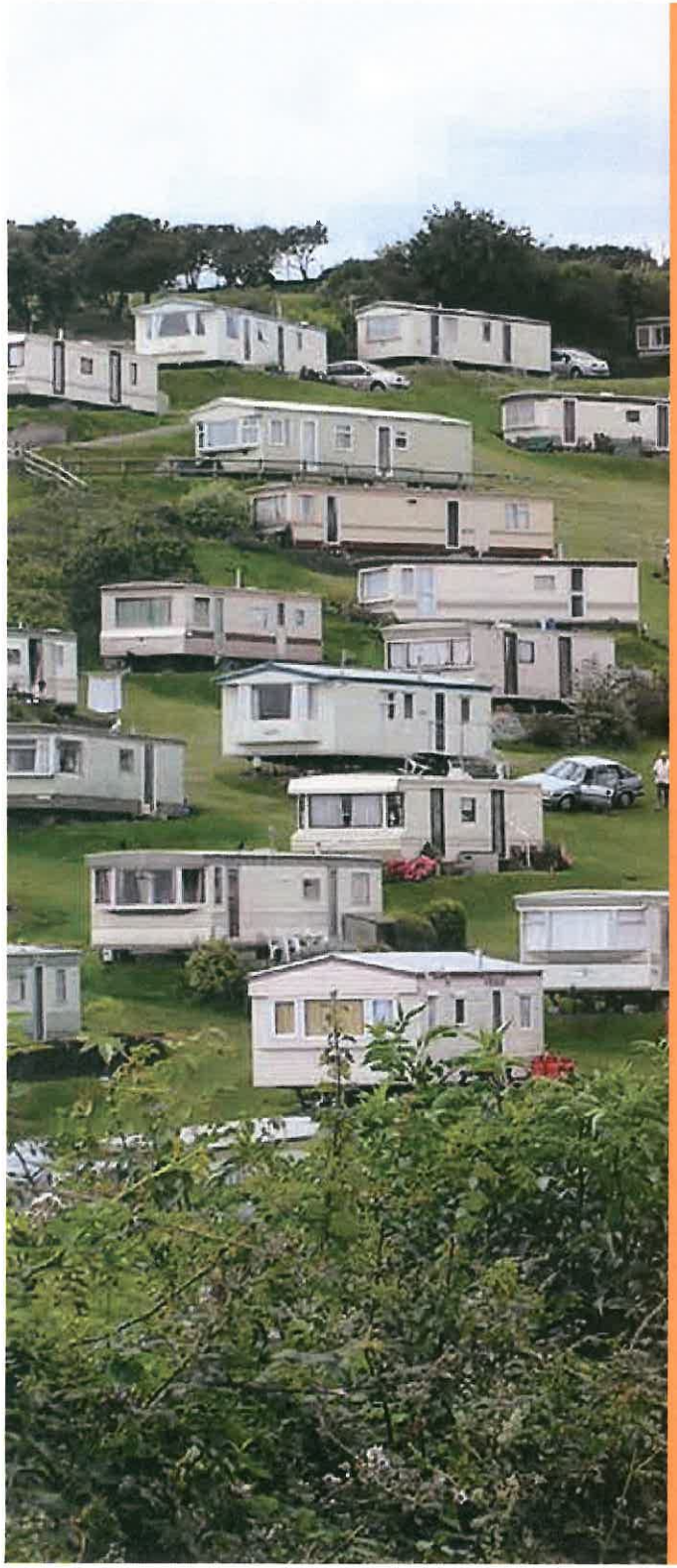
Across Los Angeles County systems, the average cost of water was 1.23% of annual household income, which suggests that water was indeed affordable for the average household in the county. More than 75% of systems, however, had an average cost of service above 1.5%, the most stringent affordability threshold recommended by a public agency. Of the systems above this threshold, more than half were served by branches of the Golden State Water Company and the California Water Service Company, which are investor owned utilities regulated by the California Public Utilities Commission. Community water systems for which we could not collect pricing data in Los Angeles County tended to be much smaller and serve populations with lower median incomes than those that did report pricing data. Affordability may be more of a concern among customers of these systems due both to the higher average cost of service provided by small water systems and the lower income levels among customers of these systems.



Annual Water Cost as a Percentage of Median Household Income



Source: UCLA Luskin Center for Innovation, see "Methodology: Water Pricing, Cost and Affordability"



Needs-Based Customer Assistance Programs

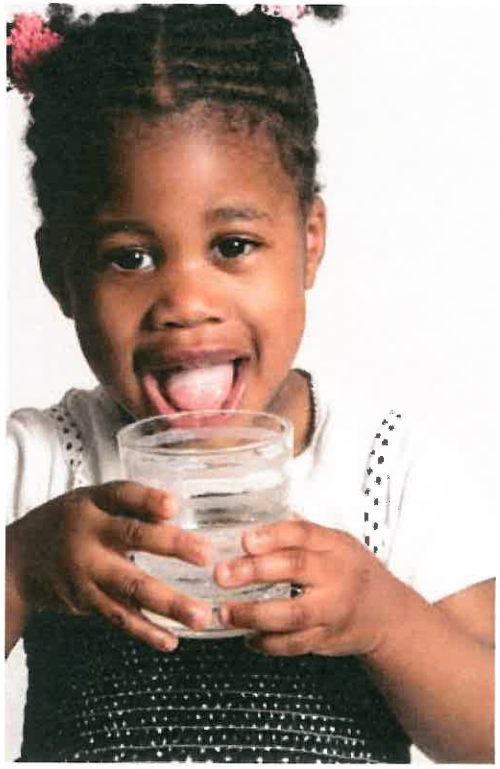
Needs-Based Customer Assistance Programs

Needs-based assistance programs offer relief for low-income or otherwise vulnerable residential water customers who have difficulty affording the cost of water service to meet household needs. Assistance can take the form of reduced prices, fixed credits, utility tax exemptions, or percentage discounts. While state agencies operate assistance programs for underperforming water systems, needs-based assistance programs for households are generally, if not exclusively, funded by individual community water systems.[16] The type and amount of assistance are thus not standardized across community water systems in Los Angeles, much less the entire state. In our survey, less than 25% of the community water systems in Los Angeles County reported offering any sort of needs-based assistance program, with CPUC-regulated systems and large municipal systems being much more likely to do so. The capacity to offer needs-based assistance thus appears correlated to the type and size of system. More than 90% of these systems offered assistance exclusively on the basis of low household income.

Assistance Packages Offered

Type of benefit

Low-income customer assistance programs vary substantially in content. Nearly 50% of programs offer a fixed credit to ratepayers, while 25% offered a percentage discount (up to a certain percent). The range of other benefits offered to low-income customers included utility tax exemptions and flat fee exemptions which are similar to fixed credits. A few systems offered assistance packages that charged an entirely different and lower set of fixed and variable rates to enrolled low-income customers, and a few other systems offered a rate stability guarantee.



Eligibility requirements

The need for assistance is also defined by each system. Many systems rely on the same income standards employed by utilities regulated by the California Public Utility Commission to determine eligibility for the California Alternative Rates for Energy (CARE) program. For instance, Suburban Water Systems of Glendora allows customers to prove their eligibility for assistance either by showing current enrollment in other energy utility's low-income assistance programs or on the basis of income thresholds, adjusted to household size, which are provided by CARE. Under the CARE scheme, a family of four with income below $47,700 would be eligible to enroll in a participating water system's assistance program as well.

By contrast, non-income related means of eligibility for assistance programs included senior or disabled status. These conditions were usually imposed in addition to low-income criteria. For example, Santa Fe Springs' water system only provides discounts to customers that are elderly (above 60 years of age) and who meet low-income thresholds which are slightly more stringent than CARE's standards. Some systems also only grant enrollment in some needs-based assistance program for a limited time, placing a fairly high burden on eligible households to remain enrolled.

Ease of Enrollment

The ease of enrollment in needs-based customer assistance programs influences uptake. Water systems provided two different means to enroll:

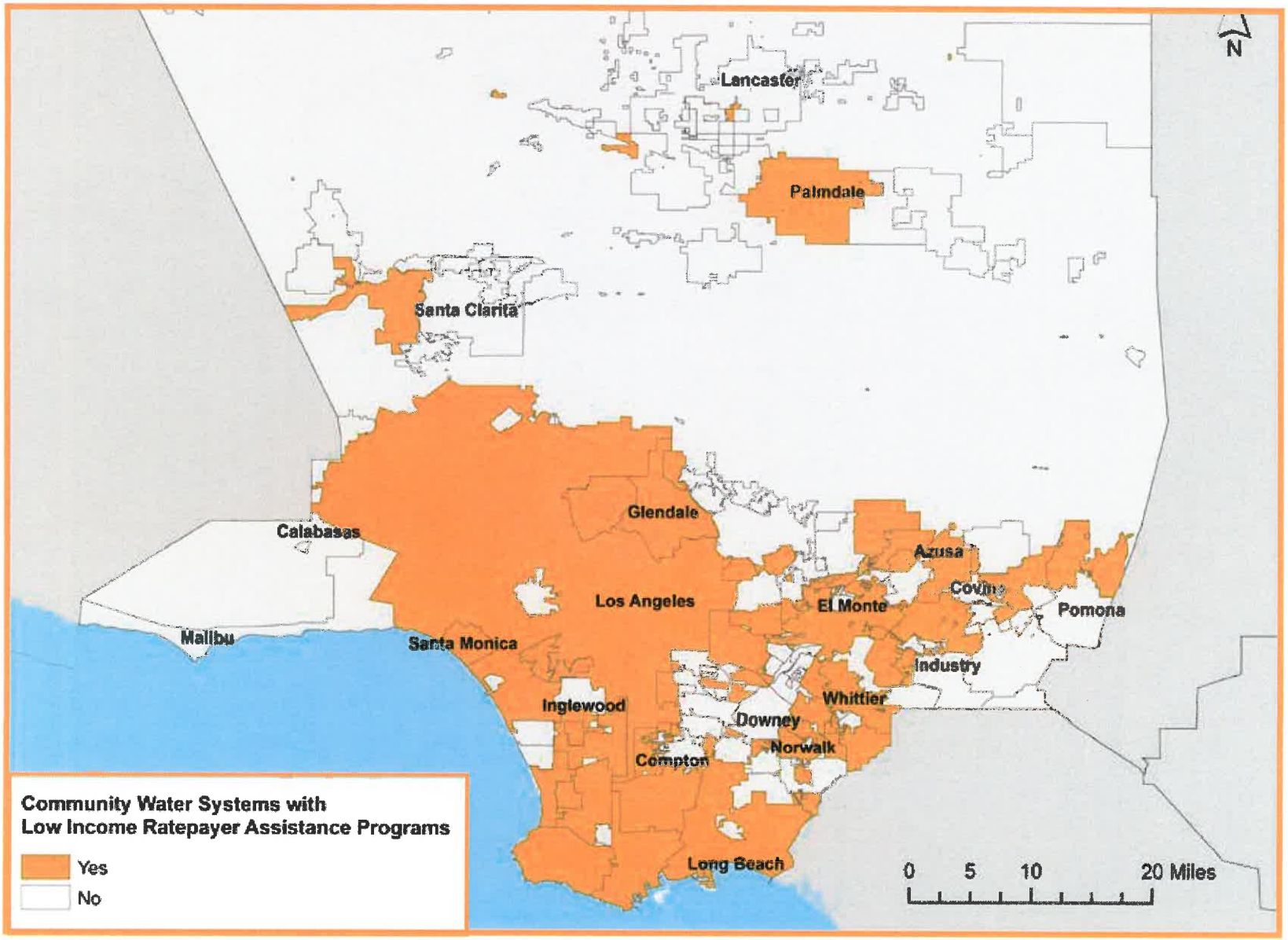
1) households could either download an application from the internet and send it via U.S. mail to the system's billing office, or

2) complete enrollment online.

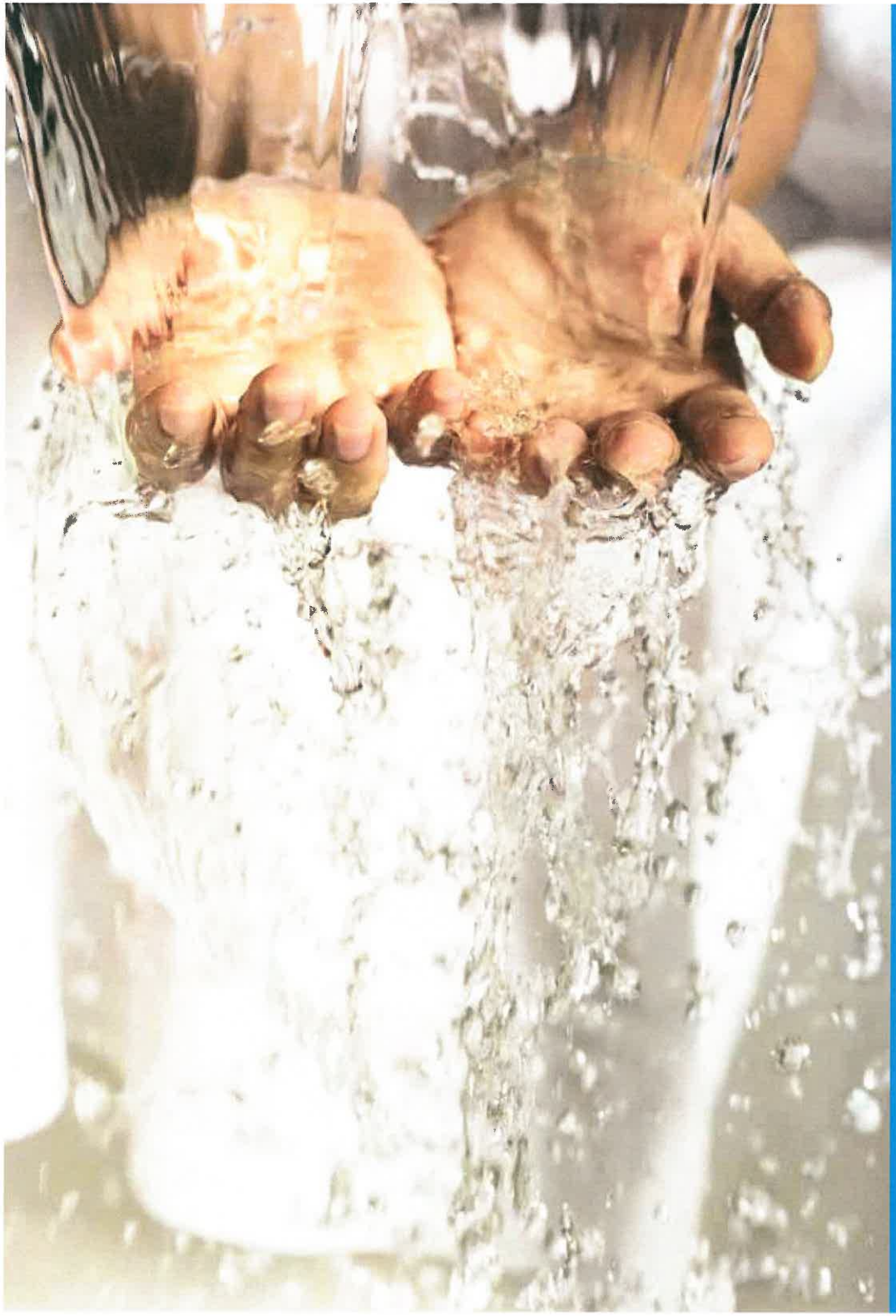
However, only 10% of systems allowed for enrollment solely online whereas the rest required that customers download an application and return it to the system's office. In some cases, enrollment also required that households prove their low income status by sending copies of their official tax return forms or demonstrating participation in other low-income assistance programs. Assistance programs are thus practically inaccessible to residents who do not receive their income from a government-registered employer. On the other hand, programs are also more accessible to households already receiving benefits from other government assistance programs.

Another important dimension of accessibility to low-income assistance programs is the language in which enrollment materials are offered, as affordability is likely lower among foreign-born or non-native English speaking households. Seventy five percent of water systems in Los Angeles County which offered needs-based assistance programs also made enrollment materials available in Spanish as well as English. Additionally, vu housing who do not directly pay for water service are typically not eligible for low-income customer assistance, even if they meet low income or other need thresholds. Multi-family unit managers or landlords are also not able to apply for assistance on eligible residents' behalf, and the benefits from needs-based programs are thus under-utilized to ease the affordability burden. The development of community water system programs which allow multi-family housing tenants to take advantage of water-related rebates for which they are eligible is much needed, especially in urbanized counties such as Los Angeles.

Community Water Systems with Low Income ratepayer Assistance Programs



Source: UCLA Luskin Center for Innovation, see "Methodology: Needs-Based Customer Assistance"



Appendix

Methodology

Community Water System Boundaries

UCLA researchers developed a methodology for drawing a polygon to represent the approximate boundary of a community water system service area. Community water systems are represented in terms of the extent of their drinking water distribution system, the network of underground pipes that distribute drinking water to residential communities. Community water systems with several discontinuous service areas were represented as multi-part polygons.

Data Sources

- U.S. EPA Safe Drinking Water Information System: http://oaspub.epa.gov/enviro/sdw_query_v2.get_list?wsys_name=&fac_search=fac_beginning&fac_county=LOS+ANGELES&pop_serv=500&pop_serv=3300&pop_serv=10000&pop_serv=100000&pop_serv=100001&sys_status=active&pop_serv=&wsys_id=&fac_state=CA&last_fac_name=&page=1&query_results=&total_rows_found= (2014).
- California Department of Public Heath, Water Boundary Tool: http://www.ehib.org/page.jsp?page_key=762 (updated continuously, captured July 2014).
- LA County GIS Portal: Water Purveyor Service Areas, http://egis3.lacounty.gov/dataportal/2011/01/27/water-purveyor-service-areas/ (2009).
- California-Atlas Geospatial Clearing House, http://www.atlas.ca.gov/download.html#/casil/boundaries (2004).
- Urban Water Management Plans, http://www.water.ca.gov/urbanwatermanagement/2010uwmps/ (2010).
- Water system self description of service areas.

Method

- A table of active community water systems serving Los Angeles County, California was downloaded from the U.S. EPA Safe Drinking Water Information System. Water wholesalers were excluded from this base-table.
- The community water systems on the U.S. EPA base-table were cross-checked with three geospatial layers to determine how many community water systems had been previously mapped. Existing geospatial information was aggregated into a new LA County Community Water System basemap.
- The boundaries of community water systems with existing geospatial data were ground-truthed using Urban Water Management Plans, water system self descriptions accessible by internet, historical maps and Google Maps.
- The boundaries of community water systems without existing geospatial data were developed by GIS analysts using Urban Water Management Plans, water system self descriptions accessible by internet, historical maps and Google Maps.

Community Water System Governance Types

Metric: Governance type for each community water system.

Every community water system in the United States falls into one of several governance types. Identifying the type of governance structure for each system may be as simple as looking at the system's name (ex. Los Angeles County Water Works District or Maywood Mutual Water Company). However, some system names were misleading. For example, Palmdale Water District was originally formed as an irrigation district and subsequently removed "irrigation" from its name. Researchers also identified many governance types by self descriptions where accessible by web and checked state business license databases. Researchers could not confirm the governance structures for seven systems, despite several attempts to directly contact water managers in these systems.

Data Sources

- System self-description via public website
- Wysk.com Business to Business data hub
- Direct communication with water managers

Method

- Water system names were evaluated for indicators of governance type
- Public information sources were evaluated for systems with no clear indicator of governance type (water system websites)
- Direct calls were made to water system managers to identify water system governance type

Community Water System Water Portfolio: Single Source Dependency

Metric: Community water systems that depend 100% on groundwater or purchased surface water sources.

Every community water system has a water supply portfolio, the collection of water sources that constitute the system's total available supply of water. Generally this is measured by calculating the percentage of the system's total water supply produced by individual sources like groundwater wells, imported purchased water, recycled water, and surface water over a period of time. The state collects data on water portfolios for urban water systems, which serve more than 3,000 connections or more than 3,000 acre-feet of water annually. For Very Small and Small water systems (serving under 3,300 people), the State Water Resources Control Board published information on all community water systems that are 100% dependent on groundwater. Finally the state's Drinking Water Watch database provides information for each water system on their water sources, providing a clear indicator for community water systems that are reliant on a single source of water like groundwater or imported purchased water.

Data Sources

- State Water Resources Control Board. "Communities that Rely on a Contaminated Groundwater Source for Drinking Water," Appendix 8: List of Community Water Systems that Rely on a Contaminated Groundwater Source for Drinking (2002-2010).
- Department of Water Resources: DOST Table 16 Water Supplies- Current and Projected http://www.water.ca.gov/urbanwatermanagement/2010_Urban_Water_Management_Plan_Data.cfm, 2010.
- California Drinking Water Watch Database: http://drinc.ca.gov/DWW/index.jsp (data updated on a continuous basis).

Method

- Using Appendix 8 from the SWRCB report "Communities that Rely on a Contaminated Groundwater Source for Drinking Water," identified the community water systems in LA County that relied 100% on groundwater in the 2002-2010 drinking water quality compliance period.
- Evaluated Department of Water Resources water supplies dataset for community water systems in LA County that relied 100% on purchased surface water supplies.
- For community water systems not identified in either datasets, researchers looked-up individual systems using the California Drinking Water Watch Database. Single-source dependency was determined by the "Source of Water" and "Water Purchases" web-parts.

Community Water Systems that Rely on Contaminated Groundwater Sources

Metric: Percent of system groundwater wells with primary contamination.

A groundwater reliant community is a community water system that gets at least part of its drinking water from a groundwater source. Using California Department of Public Health water quality data, the State Water Resources Control Board evaluated the prevalence of groundwater reliant communities with raw groundwater sources that exceed state drinking water quality regulations (called Maximum Levels of Contaminants). The state's dataset contains the total number of groundwater wells in each community water system and the number of system wells in which primary contamination was detected. By dividing the number of contaminated wells by the total number of system wells for each community water system, researchers developed a metric indicating the magnitude of contamination issues from groundwater for every community water system in the county. The 2002-2010 period was the last full nine-year compliance cycle, in which every community water system well in the state has complete bacterial and chemical testing results.

Data Sources

- State Water Resources Control Board. "Communities that Rely on a Contaminated Groundwater Source for Drinking Water," Appendix 8: List of Community Water Systems that Rely on a Contaminated Groundwater Source for Drinking (2002-2010).

Method

- Developed Appendix 8: List of Community Water Systems that Rely on a Contaminated Groundwater Source for Drinking (2002-2010) into a table format, and calculated the percentage of groundwater wells in each systems with detected principal contamination.
- Joined tabular database of contaminated groundwater sources of drinking water to geospatial basemap of community water system boundaries via public water system identification number, a unique ID code for every public water system in the state (PWSID).

Small Community Water Systems

Metric: Population served by community water system.

As part of the permitting and compliance regulations for community water systems in the United States, system managers must count the number of connections served and estimate the number of people served by the community water system. By definition, community water systems serve water for human consumption to at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents. Very Small water systems serve 25 to 500 residents, while Small water systems serve 501 to 3,300 residents.

Data Sources

- U.S. EPA Safe Drinking Water Information System: http://oaspub.epa.gov/enviro/sdw_query_v2.get_list?wsys_name=&fac_search=fac_beginning&fac_county=LOS+ANGELES&pop_serv=500&pop_serv=3300&pop_serv=10000&pop_serv=100000&pop_serv=100001&sys_status=active&pop_serv=&wsys_id=&fac_state=CA&last_fac_name=&page=1&query_results=&total_rows_found= (extracted June 2014).

Method

- Downloaded table of Los Angeles County community water systems with service population attributes from U.S. EPA Safe Drinking Water Information System website.
- Mapped out community water systems serving between 25 and 3,300 residents.

Climate Change: Increase in Average Temperature and Extreme Heat Days by Mid-Century

Given available downscaled predictions of warming in the greater Los Angeles area, this Atlas and Policy Guide aims to create a vivid picture of what warming will mean for community water systems. The predictions for increases in average temperature and extreme heat days are projecting to 2050, only 35 years into the future. This report uses warming estimates based on the "business as usual" emission scenario, referred to as Representative Concentration Pathways (RCP) 8.5. It is essential that local, regional, and state regulators are able to visualize and internalize the near term consequences of the worst case emission scenario.

Metric: Average Temperature Increase by Mid-Century (RCP 8.5).

Data Sources

- Sun F, D Walton, and A Hall. 2015. "A hybrid dynamical–statistical downscaling technique, part II: End-of-century warming projections predict a new climate state in the Los Angeles region." Journal of Climate, in press.

Method

- Procured gridded raster layer for projected increase in average temperature by mid-century using RCP 8.5 scenario.
- Divided gridded raster layer into equal size smaller pieces and converted raster centroids to points.
- Executed spatial join processing using ArcGIS 10.2, in which all points within each community water system boundary were aggregated and mean average temperature increase was calculated for each community water system.

Metric: Increase in Extreme Heat Days by Mid-Century (RCP 8.5).

Data Sources

- Sun F, D Walton, and A Hall. 2015. "A hybrid dynamical–statistical downscaling technique, part II: End-of-century warming projections predict a new climate state in the Los Angeles region." Journal of Climate, in press.

Method

- Data requested from Fengpeng Sun, UCLA Oceanic and Atmospheric Sciences, in ASCII format.
- Mapped gridded latitude/longitude points using ESRI ArcGIS 10.2.
- Executed spatial join function, joining all gridded points within 2 km of each community water system boundary. Calculate mean, minimum and maximum values for baseline extreme heat days and mid-century extreme heat days for each system.
- Calculated difference between system-level aggregated mean baseline heat days and system-level aggregated mid-century extreme heat days.

Disadvantaged Communities

Metric: Percentage of service population made up of disadvantaged communities.

Disadvantaged communities suffer significant environmental health risks due to socio-economic and demographic factors as well as exposure to environmental hazards like air, soil, and water pollution. The Office of Environmental Health Hazard Assessment developed an index for identifying disadvantaged communities around the state. The index balances the sensitivity of populations (young and elderly, impoverished, underemployed) against exposure to air, soil and water pollution.

Data Sources

- California Office of Environmental Health Hazard Assessment, California Health Screening Assessment Tool 2.0: CES Index Score for California Census Tracts http://oehha.ca.gov/ej/ces2.html (2014).
- Community water system boundaries geospatial layer.

Method

- Downloaded table of all census tracts in California with CES Index Scores assigned to each tract.
- Identified census tracts in Los Angeles County with Index Scores in the top 20% of scores in California.
- Used ArcGIS 10.2 geoprocessing spatial overlay tools to calculate an estimate of disadvantaged community populations living in each community water system. Where necessary, census tracts were divided along community water system boundaries, assigning population estimates based on split census-tract areas.

Low-Income Households

Metric: Percentage of service population made up of low-income households.

Low-income customers are vulnerable to increases in water rates that may result from conservation policies, water supply projects, or other climate change adaptation measures. Understanding the breakdown of household income at the system level will help water managers design water rates and conservation incentives that support sustainable water management.

Data Sources

- American Community Survey (ACS) 5-Year Estimates 2008-2012, accessed through Social Explorer http://www.socialexplorer.com/data/ACS2012_5yr/metadata/
    - Variable: T056A006 Household Income (In 2012 Inflation Adjusted Dollars)- Cumulative- Number of Households Earning Less than $30,000
    - Variable: T056_001 Number of Households
- U.S. Census Bureau: 2013 TIGER/Line Block Group Shapefile https://www.census.gov/geo/maps-data/data/tiger-line.html
- Los Angeles County Land Parcels: Modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map, http://solarmap.lacounty.gov (2009)

Method

- Downloaded variables T056A006 Household Income (In 2012 Inflation Adjusted Dollars)- Cumulative- Less than $30,000 and T056_001 Number of Households from the American Community Survey 5-Year Estimates 2008-2012, accessed through Social Explorer.
- Joined data tables to geospatial layer for U.S. census block groups in Los Angeles County.
- Using ArcGIS 10.2 geoprocessing toolkit, intersect tool, assigned census block group attributes to the residential property parcels located within each census block group. We then merged groups of residential parcels sharing unique census block group IDs into multipart polygons. Instead of assuming that households are evenly distributed across census block groups, we attributed household characteristics to parcels with residential structures. Assigning census block group attributes to their corresponding residential tracts reduced the error in the final stage when the attributes are summed to the community water system level.
- Using ArcGIS 10.2 geoprocessing toolkit, spatial join tool, overlaid community water system boundaries on top of residential parcel groups. This geoprocessing tool aggregates ACS field values from residential parcel groups on an area-weighted basis for each community water system boundary.

- While this method produced strongest results for Medium, Large and Very Large community water systems, the aggregate estimates for small and rural systems were less accurate. For community water systems containing less than three residential parcels (78 community water systems), for example a mobile home park, individual estimates were calculated using an area-weighted average of estimates for each census block group intersecting each community water system.
- For each community water system, the sum of variable T056A006 was divided by variable T056_001 to determine the percentage households in each community water system earning less than $30,000 annually.

Very Young and Elderly Populations

Metric: Percentage of service population made up of very young and elderly residents.

Very young and elderly populations are highly susceptible to the adverse health effects from drinking poor quality water. In the event of supply curtailment, these populations will also face obstacles accessing replacement water supplies. Water managers with an understanding of vulnerable customers will more effectively provide relief in case of water quality or supply emergencies.

Data Sources

- American Community Survey (ACS) 5-Year Estimates 2008-2012, accessed through Social Explorer http://www.socialexplorer.com/data/ACS2012_5yr/metadata/
    - Variable: T007A003 Age – Cumulative – Less than 10 Years
    - Variable: T007B011 Age – Cumulative – More than 75 years
- U.S. Census Bureau: 2013 TIGER/Line Block Group Shapefile https://www.census.gov/geo/maps-data/data/tiger-line.html
- Los Angeles County Land Parcels: Modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map, http://solarmap.lacounty.gov (2009)

Method

- Downloaded variables T007A003 Age – Cumulative – Less than 10 Years and T007B011 Age- Cumulative – More than 75 years from the American Community Survey 5-Year Estimates 2008-2012, accessed through Social Explorer.
- Joined data tables to geospatial layer for U.S. census block groups in Los Angeles County.
- Using ArcGIS 10.2 geoprocessing toolkit, intersect tool, assigned census block group attributes to the residential property parcels located within each census block group. We then merged groups of residential parcels sharing unique census block group IDs into multipart polygons. Instead of assuming that households are evenly distributed across census block groups, we attributed household characteristics to parcels with residential structures. Assigning census block group attributes to their corresponding residential tracts reduced the error in the final stage when the attributes are summed to the community water system level.
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- While this method produced strongest results for Medium, Large and Very Large community water systems, the aggregate estimates for small and rural systems were less accurate. For community water systems containing less than three residential parcels (78 community water systems), for example a mobile home park, individual estimates were calculated using an area-weighted average of estimates for each census block group intersecting the community water system.
- For each community water system, the sum of variable T007A003 and T007B011 was divided by service population estimates to determine the percentage of service population made up of very young and elderly populations in each community water system.

Housing Tenure

Metric: Percentage of housing units by tenure status (owner-occupied, renter-occupied).

Household tenure may be a crucial determinate in the effectiveness of indoor and outdoor household conservation incentives. Owner-occupied households are more likely to have an account with water utilities than renter-occupied households. As we learn more about the relationship between household characteristics and water use, this system-level analysis of household tenure will be crucial for efficiently marketing household conservation incentives.

Data Sources

- American Community Survey (ACS) 5-Year Estimates 2008-2012, accessed through Social Explorer http://www.socialexplorer.com/data/ACS2012_5yr/metadata/
    - Variable: T094_002 Owner-Occupied Housing Units
    - Variable: T094_003 Renter-Occupied Housing Units
    - Variable: T097_001 Total Housing Units
- U.S. Census Bureau: 2013 TIGER/Line Block Group Shapefile https://www.census.gov/geo/maps-data/data/tiger-line.html
- Los Angeles County Land Parcels: Modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map, http://solarmap.lacounty.gov (2009)

Method

- Downloaded variables T094_002 Owner-Occupied Housing Units, T094_003 Renter-Occupied Housing Units and T097_001 Total Housing Units from the American Community Survey 5-Year Estimates 2008-2012, accessed through Social Explorer.
- Joined data tables to geospatial layer for U.S. census block groups in Los Angeles County.
- Using ArcGIS 10.2 geoprocessing toolkit, intersect tool, assigned census block group attributes to the residential property parcels located within each census block group. We then merged groups of residential parcels sharing unique census block group IDs into multipart polygons. Instead of assuming that households are evenly distributed across census block groups, we attributed household characteristics to parcels with residential structures. Assigning census block group attributes to their corresponding residential tracts reduced the error in the final stage when the attributes are summed to the community water system level.
- Using ArcGIS 10.2 geoprocessing toolkit, spatial join tool, overlaid community water system boundaries on top of residential parcel groups. This geoprocessing tool aggregates ACS field values from residential parcel groups on an area-weighted basis for each community water system boundary.
- While this method produced strongest results for Medium, Large and Very Large community water systems, the aggregate estimates for small and rural systems were less accurate. For community water systems containing less than three residential parcels (78 community water systems), for example a mobile home park, individual estimates were calculated using an area-weighted average of estimates for each census block group intersecting the community water system.
- For each community water system, the sum of variable T094_002 was divided by variable T097_001 to determine the percentage housing units in each community water system that are owner-occupied. The sum of variable T094_003 was divided by variable T097_001 to determine the percentage housing units in each community water system that are renter-occupied.

Housing Units

Metric: Percentage of housing units by type (single-unit, multi-unit).

In addition to household tenure, household type may be another factor that water managers should consider when designing water conservation incentive programs, especially outdoor water conservation programs. Single-unit households are more likely than multi-unit households to control residential landscaping and watering. Conservation incentives that encourage lawn replacement will be most effective in areas with high concentrations of single-unit households.

Data Sources

- American Community Survey (ACS) 5-Year Estimates 2008-2012, accessed through Social Explorer http://www.socialexplorer.com/data/ACS2012_5yr/metadata/
    - Variable: T097_001 Total Housing Units
    - Variable: T097_002 Single Housing Units
    - Variable T097_005 2 Housing Units
    - Variable: T097_006 3 or 4 Housing Units
    - Variable: T097_007 5 to 9 Housing Units
    - Variable: T097_008 10 to 19 Housing Units
    - Variable: T097_009 20 to 49 Housing Units
    - Variable: T097_010 50 or more
- U.S. Census Bureau: 2013 TIGER/Line Block Group Shapefile https://www.census.gov/geo/maps-data/data/tiger-line.html
- Los Angeles County Land Parcels: Modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map, http://solarmap.lacounty.gov (2009)

Method

- Downloaded variables T097_001 Total Housing Units, T097_002 Single Housing Units, T097_005 2 Housing Units, T097_006 3 or 4 Housing Units, T097_007 5 to 9 Housing Units, T097_008 10 to 19 Housing Units, T097_009 20 to 49 Housing Units, and T097_010 50 or more Housing Units from the American Community Survey 5-Year Estimates 2008-2012, accessed through Social Explorer.
- Joined data tables to geospatial layer for U.S. census block groups in Los Angeles County.
- Using ArcGIS 10.2 geoprocessing toolkit, intersect tool, assigned census block group attributes to the residential property parcels located within each census block group. We then merged groups of residential parcels sharing unique census block group IDs into multipart polygons. Instead of assuming that households are evenly distributed across census block groups, we attributed household characteristics to parcels with residential structures. Assigning census block group attributes to their corresponding residential tracts reduced the error in the final stage when the attributes are summed to the community water system level.
- Using ArcGIS 10.2 geoprocessing toolkit, spatial join tool, overlaid community water system boundaries on top of residential parcel groups. This geoprocessing tool aggregates ACS field values from residential parcel groups on an area-weighted basis for each community water system boundary.
- While this method produced strongest results for Medium, Large and Very Large community water systems, the aggregate estimates for small and rural systems were less accurate. For community water systems containing less than three residential parcels (78 community water systems), for example a mobile home park, individual estimates were calculated using an area-weighted average of estimates for each census block groups intersecting the community water system.
- For each community water system, the sum of variable T097_002 was divided by variable T097_001 to determine the percentage housing units in each community water system that are single units. The sum of variables T097_005 through T097_010 was divided by variable T097_001 to determine the percentage housing units in each community water system that are multiple units.

Building Age

Metric: Percentage of residential structures constructed before or after 1970.

Older single-family and multi-family dwellings may use more water than recently built structures of the same size. Many water systems provide rebates and incentives for replacing water intensive faucet heads and appliances with more water-efficient models. Older residential structures have the highest potential for indoor water-efficiency improvements, and thus should be the primary target of these water-efficiency incentives. Water managers with an understanding of residential building age in their customer base have the advantaged of geographically targeting households with the most to gain from water-efficiency rebate programs.

Data Sources

- Los Angeles County Land Parcels: Modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map, http://solarmap.lacounty.gov (2009)

Method

- The "year built" of residential parcels is included as an attribute in the Los Angeles County Land Parcels geospatial layer.
- Using ArcGIS 10.2 geoprocessing tool, identity, we assigned the attributes of each community water system (system name and public water system identification number) to each residential parcel.
- Using the "summarize" function of ArcGIS 10.2, we calculated the number of residential units built before 1970 and the number of residential units built after 1970 for each community water system.

Public Access to System Information

Metric: Presence of system website and information provided on website.

We identified whether a given water system maintained a publicly-available website. If a website existed, we identified whether the website contained information regarding water rates, the state-wide drought, conservation rebates and low-income customer assistance.

Data Sources

- Original dataset created by UCLA researchers
- Public websites

Method

- UCLA research assistants used internet browsers and standard web search engines like Google and Yahoo to locate publicly accessible websites dedicated to the provision of water service information about specific community water systems. Public websites dedicated to the provision of water service information for a specific utility were cataloged by UCLA researchers.

Water Conservation Programs

Metric: Presence, range and ease of enrollment in systems' conservation rebate programs

We identified whether a given water system offered rebates for water conservation to customers, collected data on the range of rebates offered by each system, and the means to enroll in rebate programs.

Data Sources

- Original dataset created by UCLA researchers
- Community water system public websites
- Phone interviews with community water system representatives

Method

- If a community water system had a publically accessible website for the provision of water service information, UCLA researchers searched website for information on water conservation rebates for customers.
- Community water systems without publically accessible websites were contacted directly by phone. UCLA researchers conducted a short survey by phone that included questions about the provision of water conservation rebates for customers. Unresponsive systems were contacted by phone up to three times, during normal business hours on a Tuesday, Wednesday or Thursday, to maximize the potential response rate.
- Many community water systems providing rebates for residential water conservation directed customers to the rebate enrollment web-page through Metropolitan Water District of Southern California. UCLA researchers took note of rebate programs supported by Metropolitan Water District and other external entities. In this way, our dataset differentiates between rebate programs supported by Metropolitan versus other entities.
- Researchers made a critical assumption about determining whether or not a community water system provided rebates to encourage water conservation. If a community water system had a public website, and water conservation rebates were not advertised on this public website, then we assumed the community water system did not offer customers water conservation rebates.

Water Pricing, Cost and Affordability

Metric: Median Household Income

Median household income is the 50th percentile of household income in a given geography. For the purposes of this report, UCLA researchers created a spatial method of aggregating U.S. Census block group estimates of median household income to the community water system level.

Data Sources

- American Community Survey 2013 (ACS) 5-Year Estimates 2009-2013, accessed through Social Explorer http://www.socialexplorer.com/data/ACS2013_5yr

  Variable: T057_001 Median Household Income (In 2013 Inflation Adjusted Dollars)
- U.S. Census Bureau: 2013 TIGER/Line Block Group Shapefile https://www.census.gov/geo/maps-data/data/tiger-line.html
- Los Angeles County Land Parcels: Modified data from the Los Angeles County Chief Information Office, the Los Angeles County Solar Map, http://solarmap.lacounty.gov (2009)

Method

- Downloaded variable T057_001 Median Household Income for Block Groups in Los Angeles County from the American Community Survey 5-Year Estimates 2009-2013, accessed through Social Explorer.
- Instead of assuming that households are evenly distributed across census block groups, we attributed household characteristics to tax parcels with residential structures. Assigning census block group attributes to their corresponding residential tracts reduced the error in the final stage when the attributes are aggregated to the community water system level. Using ArcGIS 10.2 geoprocessing toolkit, we intersected census block group boundaries with residential property parcels located within each census block group. We then merged groups of residential parcels sharing census block group IDs (GEOIDs) into multipart polygons.

- Using ArcGIS 10.2 geoprocessing toolkit, intersect tool, split residential tract polygons into groups based on an overlay with community water system boundaries. This process split residential polygons by community water system boundary and 'tagged' residential tract polygons with community water system identities (system name and water system identification numbers).
- Calculated the area of multipart residential polygons.
- Joined the T057_001, Median Household Income, data table to the multipart residential polygon layer by GEOID.
- Calculated new field: [Median Household Income] x [Area].
- Exported attribute table to Microsoft Excel, and created a Pivot table. In Pivot table, summed the area-weighted median household income values by community water system name. The resulting output table is the area-weighted average median household income for community water system boundaries.
- While this method produced strongest results for Medium, Large and Very Large community water systems, the aggregate estimates for small and rural systems were less accurate. For community water systems containing less than three residential parcels (78 community water systems), for example a mobile home park, individual estimates were calculated using an area-weighted average of median household income for each census block group intersecting the community water system.

Metric: Annualized Water Cost for Typical Single-Family Residential Customer

The annualized cost of single-family residential water service varies considerably across Los Angeles County, including the timing, structure and value of water service costs. Using a document investigation and survey approach, UCLA researchers gathered water service cost information and calculated typical single-family service costs for a residential customer. Researchers made two major assumptions: 1) single-family residential customers are connected to the drinking water distribution system by the smallest available connection size (5/8" connection, or ¾" if 5/8" was not offered); 2) single-family residential customers consume an average of 18 hundred cubic feet (CCF) of potable water over one month. The assumption of 18 CCF per month per household is based on dissertation research by Caroline Mini (2013) who calculated average single family residential water use in City of Los Angeles between 2000 and 2010 as 102 m3/household per bimonthly billing period, or 36 CCF per household per bimonthly billing period.

Data Sources

- Original dataset created by UCLA researchers
- Community water system public websites
- Phone interviews with community water system representatives
- Mini, Caroline. 2013. Residential Water Use and Landscape Vegetation Dynamics in Los Angeles. University of California Los Angeles.

Method

- UCLA researchers gathered water service cost information from each community water system, either through website searches or via phone
- Using assumptions made by Mini, typical single-family service costs for a residential customer in each ssytem were calculated.

Metric: Annual Water Cost as a Percentage of Median Household Income

The affordability of water service can be measured as the percentage of annual household income spent on water service costs at the water system scale.

Data Sources

- Median household income by community water systems, original dataset created by UCLA researchers
- Annualized water service costs for typical single-family residential customers by community water system, original dataset created by UCLA researchers

Method

- UCLA researchers calculated the percentage of median household income for community water systems spent on annualized water costs using Microsoft Excel. Researchers created a table with community water systems, estimated median household income (original dataset) by water system, and annualized water service costs for single-family residential customers (original dataset). Researchers created a simple formula that divides annualized water service costs by median household income, and multiplies that result by 100.
- The resulting table was joined to the community water system basemap layer, and visualized as a map in ArcGIS 10.2.

Needs-Based Customer Assistance

Metric: Presence, range and ease of enrollment in systems' needs-based customer assistance programs

We identified whether a given water system offered financial assistance to customers on the basis of need and the definition of need used by each system. We also collected data on the range of assistance offered by each system, and the means to enroll in assistance programs.

Data Sources

- Original dataset created by UCLA researchers
- Community water system public websites
- Phone interviews with community water system representatives

Method

- If a community water system had a publically accessible website for the provision of water service information, UCLA researchers searched website for information on needs-based ratepayer assistance programs.
- Community water systems without publically accessible websites were contacted directly by phone. UCLA researchers conducted a short survey by phone that included questions about the provision of needs-based ratepayer assistance programs. Unresponsive systems were contacted by phone up to three times, during normal business hours on a Tuesday, Wednesday or Thursday, to maximize the potential response rate.
- Researchers made a critical assumption about determining whether or not a community water system provided needs-based customer assistance programs. If a community water system had a public website, and needs-based assistance rebates were not advertised on this public website, then we assumed the community water system did not offer needs-based assistance.
- Corresponding residential tracts reduced the error in the final stage when the attributes are summed to the community water system level.
- Using ArcGIS 10.2 geoprocessing toolkit, spatial join tool, overlaid community water system boundaries on top of residential parcel groups. This geoprocessing tool aggregates ACS field values from residential parcel groups on an area-weighted basis for each community water system boundary.
- While this method produced strongest results for Medium, Large and Very Large community water systems, the aggregate estimates for small and rural systems were less accurate. For community water systems containing less than three residential parcels (78 community water systems), for example a mobile home park, individual estimates were calculated using an area-weighted average of estimates for each census block group intersecting the community water system.
- For each community water system, the sum of variable T007A003 and T007B011 was divided by service population estimates to determine the percentage of service population made up of very young and elderly populations in each community water system.

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2. California Department of Water Resources et al. "20x2020 Water Conservation Plan" (2010), 14.

3. "Water Rates: Water Affordability," Pacific Institute, Accessed October 15, 2014, http://pacinst.org/wp-content/uploads/sites/21/2013/01/water-rates-affordability.pdf.

4. There are 228 community water systems in Los Angeles County, as counted by U.S. EPA. Of these 228 systems, seven are considered water wholesalers, and were not included in our analysis. Despite significant investigation by UCLA researchers, service boundaries could not be determined for seven Very Small community water systems due to lack of accessible information. One community water system is currently transitioning ownership to another community water system. Therefore, this report limits the scope of analysis to 213 community water systems.

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23. There are 228 community water systems in Los Angeles County, as counted by U.S. EPA. Of these 228 systems, seven are considered water wholesalers. Despite significant investigation by UCLA researchers, service boundaries could not be determined for seven very small community water systems due to lack of accessible information. One community water system is currently transitioning ownership to another community water system. Therefore, this report limits analysis to 213 community water systems.

24. Websites could also maintain easy-to-use dashboard applications to allow customers to calculate their water bills based on different levels of use. An example of such a dashboard is provided by researchers at UNC-Chapel Hill for water systems in North Carolina. See "North Carolina Water and Wastewater Rates Dashboard," Environmental Finance Center, Accessed July 13, 2015, http://www.efc.sog.unc.edu/reslib/item/north-carolina-water-and-wastewater-rates-dashboard.

25. Given the current state of water supply availability in California, public agencies have redoubled their efforts to raise awareness of the drought among households. These efforts seem to be making a positive impact. As of October 2014, more than 90% of California households reported following news of the drought closely. More than two-thirds of voters also approved Proposition 1, which provides funding for improving state-wide water supply infrastructure, in November 2014 ("Californians and Their Government," Public Policy Institute of California, Accessed July 1, 2015, http://www.ppic.org/content/pubs/survey/S_1014MBS.pdf). Since that time, public awareness can only have increased due to further state-wide mandated restrictions on water use. While large disparities between environmental awareness and actualized household conservation practices remain, awareness does generally translate into enhanced conservation.

26. Governor Jerry Brown, April 1, 2015, "Executive Order B-29," http://gov.ca.gov/docs/4.1.15_Executive_Order.pdf.

27. The primary agencies operating the program are the California Energy Commission, the Department of Water Resources and the State Water Resources Control Board. See "California's Drought Technology Program: Investing in Innovative Water and Energey Saving Technologies," California Energy Commission, Accessed July 2, 2015, http://www.energy.ca.gov/2015publications/CEC-500-2015-025/CEC-500-2015-025-FS.pdf.

28. According to 2013 American Community Survey data, 44% of Los Angeles County's population lives in multi-family housing.

29. There remains a disparity between household awareness regarding water scarcity and water's value. A 2014 poll of a cross-section of California voters found that while 89% found the state's water shortage to be a crisis, only 16% perceived the shortage to be having a major impact on their lives (See Bettina Boxall, June 6, 2014, "Poll finds little support for drought spending despite broad awareness" Los Angeles Times). Raising prices to reflect the true cost of water delivery is the easiest way to narrow that gap in awareness.

30. Paul Rogers and Nicholas St. Fleur, February 7, 2014, "California Drought: Database shows big difference between water guzzlers and sippers," San Jose Mercury News.

31. For instance, see Kenneth, Baerenklau, Kurt Schabe, and Ariel Dinar, 2014, "The residential water demand effect of increasing block rate water budgets," Land Economics, 90(4), 683-699.

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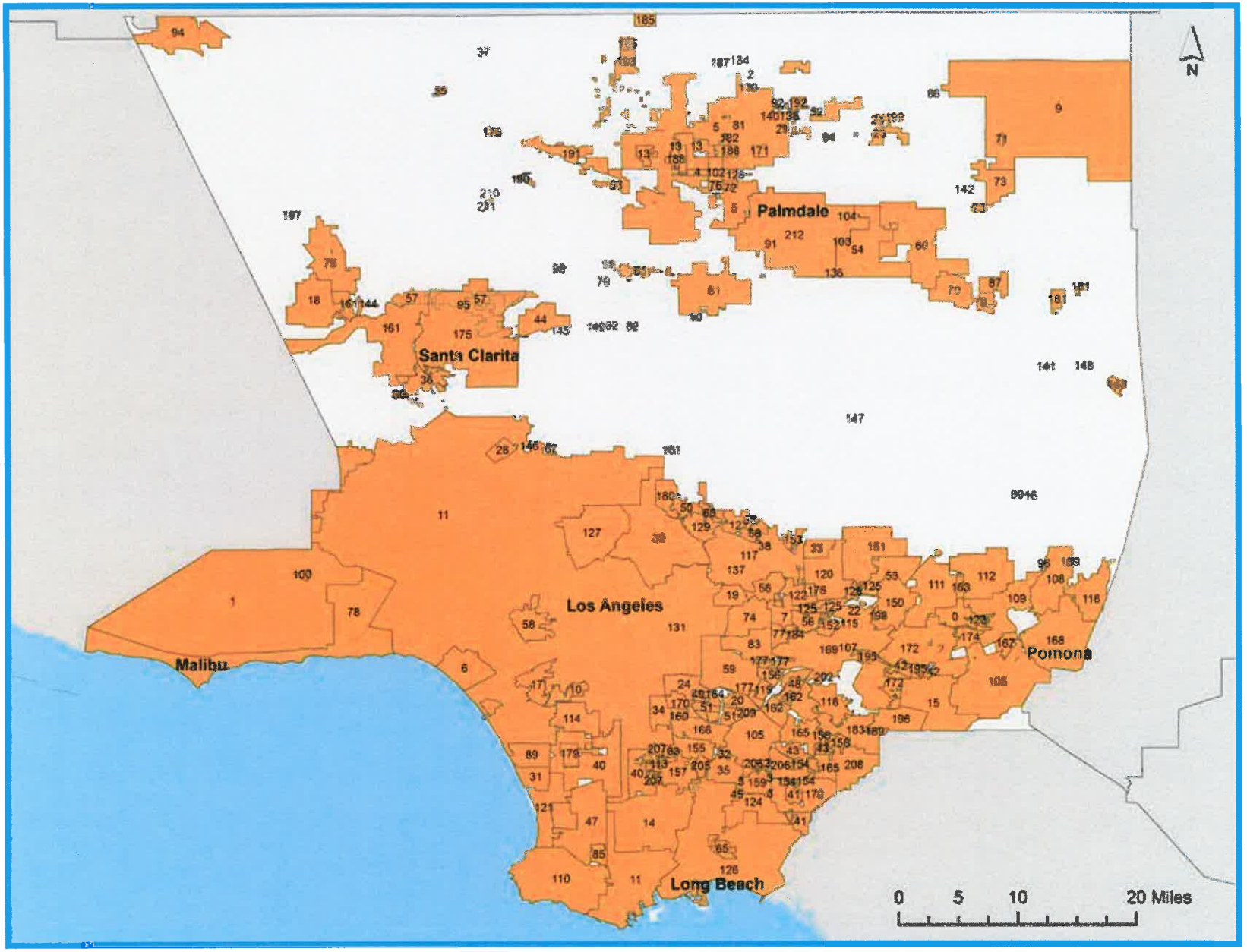
37. The California Public Utilities Commission does provide guidance and support to water systems under its remit to provide low-income assistance programs to households, but there is no state-wide mandate for all systems to provide such assistance. See Seaneen Wilson, 2007, "Assessment of Water Utility Low-Income Assistance Programs," California Public Utilities Commission Division of Water and Audits, http://www.cpuc.ca.gov/NR/rdonlyres/159B7FB3-D717-41C3-9BCE-27FFE7530AD5/0/dwa_lowincome_research_paper_112507.pdf.

Community Water Systems Gazetteer



Source: UCLA Luskin Center for Innovation, *see Methodology: "Community Water System Boundaries"*

List of Community Water Systems in Los Angeles County

0 COVINA-CITY, WATER DEPT.
1 LAS VIRGENES MUNICIPAL WATER DISTRICT
2 LANCASTER PARK MOBILE HOME PARK
3 BELLFLOWER MUNICIPAL WATER SYSTEM
4 SUNNYSIDE FARMS MUTUAL WATER COMPANY
5 LA COUNTY WATERWORKS DIST 4 & 34-LANCASTER
6 SANTA MONICA-CITY, WATER DIVISION
7 SAN GABRIEL COUNTY WATER DISTRICT
8 LLANO DEL RIO WATER COMPANY
9 LA COUNTY WATERWORKS DIST 40 REG. 35-N.E. L.A.
10 CAL/AM WATER COMPANY - BALDWIN HILLS
11 LOS ANGELES-CITY, DEPT. OF WATER & POWER
12 LINCOLN AVENUE WATER COMPANY
13 QUARTZ HILL WATER DISTRICT
14 CALIFORNIA WATER SERVICE CO. - DOMINGUEZ
15 ROWLAND WATER DISTRICT
16 CAMP WILLIAMS- RESORT
17 GOLDEN STATE WATER COMPANY - CULVER CITY
18 LA COUNTY WATERWORKS DIST 36-VAL VERDE
19 CITY OF SOUTH PASADENA
20 COMMERCE-CITY, WATER DEPT.
21 REESEDALE MUTUAL WATER COMPANY
22 RURBAN HOMES MUTUAL WATER COMPANY
23 COLORADO MUTUAL WATER COMPANY
24 VERNON-CITY, WATER DEPT.
25 OAK GROVE TRAILER PARK
26 WESTERN SKIES MOBILE HOME PARK
27 TRACT 180 MUTUAL WATER COMPANY
28 SAN FERNANDO-CITY, WATER DEPT.
29 EL RANCHO MOBILE HOME PARK
30 ANTELOPE PARK MUTUAL WATER COMPANY
31 MANHATTAN BEACH-CITY, WATER DEPT.
32 GOLDEN STATE WATER COMPANY - HOLLYDALE
33 SIERRA MADRE-CITY, WATER DEPT.
34 GOLDEN STATE WATER CO. - FLORENCE/GRAHAM
35 PARAMOUNT - CITY, WATER DEPT.
36 NEWHALL COUNTY WATER DISTRICT-NEWHALL
37 WINTERHAVEN MOBILE ESTATES
38 LAS FLORES WATER COMPANY
39 GLENDALE-CITY, WATER DEPT.
40 GOLDEN STATE WATER COMPANY - SOUTHWEST
41 GOLDEN STATE WATER COMPANY - ARTESIA
42 LA PUENTE VALLEY COUNTY WATER DISTRICT
43 GOLDEN STATE WATER COMPANY - NORWALK
44 NEWHALL COUNTY WATER DISTRICT-PINETREE
45 BELLFLOWER HOME GARDENS WATER COMPANY
46 GOLDEN SANDS MOBILE HOME PARK
47 TORRANCE-CITY, WATER DEPT.
48 PICO WATER DISTRICT
49 MAYWOOD MUTUAL WATER CO. #1
50 LA CANADA IRRIGATION DIST.
51 GOLDEN STATE WATER CO - BELL, BELL GARDENS
52 EVERGREEN MUTUAL WATER COMPANY
53 CAL-AM WATER COMPANY - DUARTE
54 LITTLEROCK CREEK IRRIGATION DIST.
55 BLEICH FLATS MUTUAL WATER CO
56 CAL/AM WATER COMPANY - SAN MARINO
57 NEWHALL COUNTY WD-TESORO DEL VALLE
58 BEVERLY HILLS-CITY, WATER DEPT.
59 CALIFORNIA WATER SERVICE CO. – EAST LA
60 LA COUNTY WW DIST 40, R24, 27,33-PEARBLSM
61 LA COUNTY WATERWORKS DISTRICT 37-ACTON
62 OASIS PARK MOBILE HOME PARK
63 GOLDEN STATE WATER CO - WILLOWBROOK
64 HEMLOCK MUTUAL WATER COMPANY
65 SIGNAL HILL - CITY, WATER DEPT.
66 RUBIO CANON LAND & WATER ASSOCIATION
67 LA COUNTY WW DISTRICT 21-KAGEL CANYON
68 TRACT 349 MUTUAL WATER COMPANY
69 CHAMPION WATER MUTUAL
70 LA COUNTY WW DIST 40 REG. 39-ROCK CREEK
71 WILSONA GARDENS MUTUAL
72 WEST SIDE PARK MUTUAL
73 LA COUNTY WW DIST 40 REG 38 LAKE L.A.
74 CITY OF ALHAMBRA
75 NEWHALL COUNTY WATER DISTRICT-CASTAIC
76 SHADOW ACRES MUTUAL WATER COMPANY
77 GOLDEN STATE WATER CO-SOUTH SAN GABRIEL
78 LA COUNTY WATERWORKS DIST 29 & 80-MALIBU
79 CASA DULCE ESTATES
80 FOLLOWS CAMP

List of Community Water Systems in Los Angeles County

81 LANCASTER WATER COMPANY
82 THE ROBIN'S NEST RECREATION RESORT
83 MONTEREY PARK-CITY, WATER DEPT.
84 TIERRA BONITA MUTUAL WATER COMPANY
85 LOMITA-CITY, WATER DEPT.
86 BAXTER MUTUAL WATER COMPANY
87 LLANO MUTUAL WATER COMPANY
88 MESA CREST WATER COMPANY
89 EL SEGUNDO-CITY, WATER DEPT.
90 ACTON REHAB CENTER
91 ALPINE SPRINGS MOBILE HOME PARK
92 BLUE SKIES MOBILE HOME PARK
93 CALIFORNIA WATER SERVICE CO-LEONA VALLEY
94 GOLDEN VALLEY MUNICIPAL WATER DISTRICT
95 LILY OF THE VALLEY MOBILE VILLAGE
96 SAN DIMAS CANYON IMPROVEMENT ASSOCIATION
97 SHERWOOD MOBILE HOME PARK
98 SLEEPY VALLEY WATER COMPANY INC.
99 SPV WATER COMPANY INC
100 THE OAKS
101 VALHALLA WATER ASSOCIATION
102 WHITE FENCE FARMS MUTUAL WC NO.3
103 JOSHUA VIEW MOBILE HOME PARK
104 PALMDALE TRAILER PARK
105 DOWNEY - CITY, WATER DEPT.
106 WALNUT VALLEY WATER DISTRICT
107 DEL RIO MUTUAL
108 LA VERNE, CITY WATER DIVISION
109 GOLDEN STATE WATER COMPANY-SAN DIMAS
110 CALIFORNIA WATER SERVICE CO. - PALOS VERDES
111 AZUSA LIGHT AND WATER
112 GLENDORA-CITY, WATER DEPT.
113 SATIVA-L.A. COUNTY WATER DISTRICT
114 INGLEWOOD- CITY, WATER DEPT.
115 STERLING MUTUAL WATER COMPANY
116 GOLDEN STATE WATER COMPANY - CLAREMONT
117 PASADENA-CITY, WATER DEPT.
118 WHITTIER-CITY, WATER DEPT.
119 SOUTH MONTEBELLO IRRIGATION DIST.
120 CITY OF ARCADIA
121 CALIFORNIA WATER SERVICE CO. - HERM/REDO
122 SUNNY SLOPE WATER COMPANY
123 SUBURBAN WATER SYSTEMS-COVINA KNOLLS
124 LAKEWOOD - CITY, WATER DEPT.
125 GOLDEN STATE WATER CO.-SOUTH ARCADIA
126 LONG BEACH-CITY, WATER DEPT.
127 BURBANK-CITY, WATER DEPT.
128 EL DORADO MUTUAL WATER COMPANY
129 VALLEY WATER COMPANY
130 THE VILLAGE MOBILE HOME PARK
131 YOUNG NAK CHURCH OF LOS ANGELES
132 DESERT PALMS MOBILE HOME PARK
133 L.A RESIDENTIAL COMMUNITY FOUNDATION
134 MITCHELL S AVENUE E MOBILE HOME PARK
135 THE RIVER COMMUNITY
136 BLUE SKIES TRAILER PARK
137 HATHAWAY-SYCAMORES CHILD FAMILY SVCS
138 CALIFORNIAN MOBILE HOME PARK
139 CAMP AFFLERBAUGH-PAIGE
140 CLEAR SKIES MOBILE HOME RANCH
141 FENNER CANYON YOUTH CONSERVATION CAMP
142 HILLCREST MOBILE HOME PARK
143 MT. HIGH EAST SKI AREA
144 PETER PITCHESS HONOR RANCHO. LAFCO. SHER
145 RIVERS END TRAILER PARK
146 SKY TERRACE MOBILE HOME PARK
147 US FOREST SERVICE-CHILAO MAIN (A-9)
148 US FOREST SERVICE-JACKSON LAKE V-4
149 WHITE ROCK LAKE RV PARK
150 VALLEY COUNTY WATER DISTRICT
151 MONROVIA-CITY, WATER DEPT.
152 EL MONTE-CITY, WATER DEPT.
153 KINNELOA IRRIGATION DISTRICT
154 NORWALK - CITY, WATER DEPT.
155 LYNWOOD-CITY, WATER DEPT.
156 MONTEBELLO LAND & WATER CO.
157 COMPTON-CITY, WATER DEPT.
158 ORCHARD DALE WATER DISTRICT
159 BELLFLOWER - SOMERSET MUTUAL WATER CO.
160 WALNUT PARK MUTUAL WATER CO.
161 VALENCIA WATER CO.

List of Community Water Systems in Los Angeles County

162 PICO RIVERA - CITY, WATER DEPT.
163 SUBURBAN WATER SYSTEMS-GLENDORA
164 MAYWOOD MUTUAL WATER CO. #3
165 SANTA FE SPRINGS- CITY, WATER DEPT.
166 SOUTH GATE-CITY, WATER DEPT.
167 CAL POLY POMONA UNIVERSITY
168 POMONA - CITY, WATER DEPT.
169 SAN GABRIEL VALLEY WATER CO-EL MONTE
170 HUNTINGTON PARK-CITY, WATER DEPT.
171 LANDALE MUTUAL WATER COMPANY
172 SUBURBAN WATER SYSTEMS-SAN JOSE
173 CALIFORNIA WATER SERVICE CO-LAKE HUGHES
174 VALENCIA HEIGHTS WATER COMPANY
175 SANTA CLARITA WATER DIVISION
176 EAST PASADENA WATER CO.
177 MONTEBELLO-CITY, WATER DEPT.
178 CERRITOS - CITY, WATER DEPT.
179 HAWTHORNE-CITY WATER DEPT.
180 CRESCENTA VALLEY COUNTY WATER DISTRICT
181 LITTLE BALDY
182 CALIFORNIA WATER SERVICE CO.-LANCASTER
183 SUBURBAN WATER SYSTEMS-WHITTIER
184 AMARILLO MUTUAL WATER COMPANY
185 SUNDALE MUTUAL WATER COMPANY A, B
186 WHITE FENCE FARMS MUTUAL WATER CO.
187 LEISURE LAKE MOBILE ESTATES
188 PALM RANCH IRRIGATION DISTRICT
189 CALIFORNIA DOMESTIC WATER COMPANY
190 GREEN VALLEY COUNTY WATER DISTRICT
191 LAKE ELIZABETH MUTUAL WATER COMPANY
192 AVERYDALE MUTUAL WATER COMPANY
193 LAND PROJECT MUTUAL WATER COMPANY
194 LYNWOOD PARK MUTUAL WATER COMPANY
195 CITY OF INDUSTRY WATERWORKS SYSTEMS
196 LA HABRA HEIGHTS COUNTY WATER DISTRICT
197 PARADISE RANCH MOBILE HOME PARK
198 VALLEY VIEW MUTUAL WATER COMPANY
199 AQUA J MUTUAL WATER COMPANY
200 ADAMS RANCH MUTUAL WATER COMPANY
201 LOWEL TRACT MUTUAL WATER COMPANY
202 BEVERLY ACRES
203 MAYWOOD MUTUAL WATER CO. #2
204 SO. CAL. EDISON CO.-SANTA CATALINA
205 PARK WATER COMPANY -LYNWOOD
206 PARK WATER COMPANY -BELLFLOWER-NORWALK
207 PARK WATER COMPANY - COMPTON
208 SUBURBAN WATER SYSTEMS-LA MIRADA
209 BELL GARDENS-CITY, WATER DEPT.
210 LOS ANGELES, CITY OF - POWER PLANT #2
211 LOS ANGELES, CITY OF - POWER PLANT #1
212 PALMDALE WATER DISTRICT

Community Water Systems Not Pictured:

WEST VALLEY COUNTY WATER DISTRICT
MUTUAL WATER OWNERS OF LOS NIETOS
LOCUST GROVE MOBILE HOME PARK
METTLER VALLEY MUTUAL
NORTH TRAILS MUTUAL WATER COMPANY
PROPERTY OWNERS WATER SYSTEM
SKYLINE MUTUAL

Wholesale Water Agencies:

CASTAIC LAKE WATER AGENCY
ANTELOPE VALLEY-EAST KERN WATER AGENCY
THREE VALLEYS MUNICIPAL WATER DISTRICT
CENTRAL BASIN MUNICIPAL WATER DISTRICT
COVINA IRRIGATING COMPANY
FOOTHILL MUNICIPAL WATER DIST.
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA


WATER

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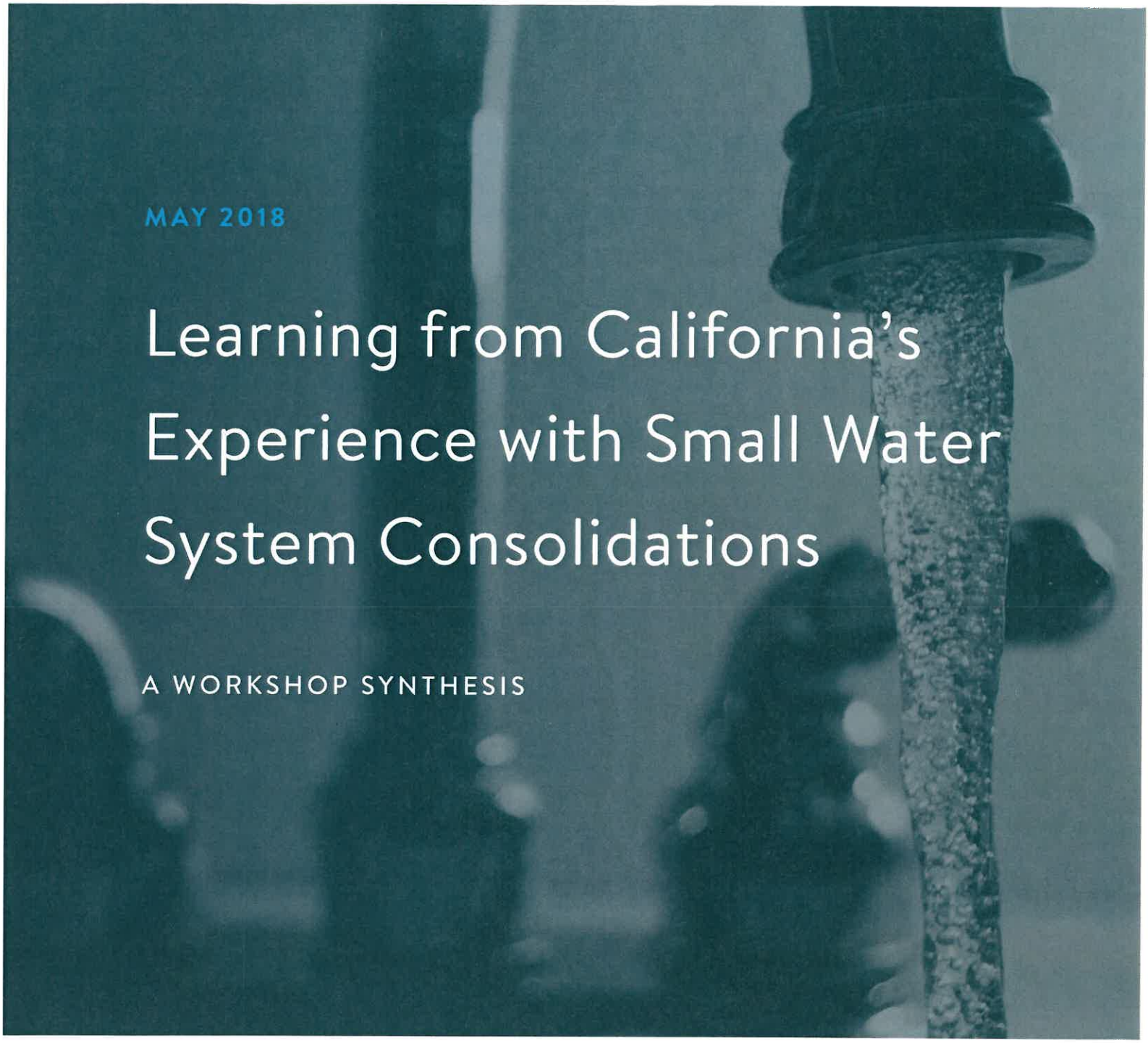

MAY 2018

Learning from California's Experience with Small Water System Consolidations

A WORKSHOP SYNTHESIS

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Camille Pannu
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UNIVERSITY OF CALIFORNIA
Center for Law, Energy & the Environment

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MAY 2018

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Self-Help Enterprises

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Eastern Municipal Water District

Juliet Christian-Smith
Water Foundation

Kathy Cole
Metropolitan Water District of Southern California

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Irvine Ranch Water District

Jan Coppinger
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Kristin Dobbin
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Community Water Center

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Martha Guzman Aceves
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Michael Minkus
California Public Utilities Commission

Ben Murphy
Cobb Area County Water District

Adán Ortega
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Nell Green Nylen, Camille Pannu, and Michael Kiparsky organized and facilitiated the workshop. Juliet Christian-Smith, Laurel Firestone, Michelle Frederick, Ryan Jensen, Alesandra Nájera, Phoebe Seaton, and Erasto Teran provided important context and substantive information in advance of the workshop. Luke Sherman contributed valuable organizational assistance. Ellen Simmons helped with notetaking during the workshop.

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Table of Contents

List of Figures, Tables, and Sidebars

Acronyms

IOU	investor-owned utility
JPA	Joint Powers Agreement / Joint Powers Authority / Joint Powers Agency
LAFCo	Local Agency Formation Commission
RCAC	Rural Community Assistance Corporation
TMF	technical, managerial, and financial (capacity)

I. Introduction

A. BACKGROUND AND NEED

California recognizes a human right to "safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes."[1] However, California's small and disadvantaged[2] communities in both rural and urban contexts can find it especially challenging to fund the water system infrastructure, operations, monitoring, and maintenance necessary to achieve this goal.[3] Small water systems[4] that provide water to at least 15 service connections and serve water to fewer than a thousand people are responsible for the bulk of the state's drinking water quality violations,[5] and an estimated 300 disadvantaged communities in California are served by systems that fail to meet state drinking water standards.[6] Other Californians rely on very small water systems or private domestic wells that lack state requirements for water quality testing and may be especially unreliable.[7]

Physical or managerial water system consolidations can create economies of scale that help address persistent water system inadequacies in small and disadvantaged communities. More than 100 consolidation projects have been completed or are ongoing in California,[8] and many more communities are likely to pursue consolidations in the future. Drivers include the enactment of Senate Bill 88 (2015), which authorized the State Water Resources Control Board to require water system consolidations under certain circumstances; increasingly stringent drinking water standards[9]; and increasingly frequent emergencies, like droughts and fires,[10] that expose water system vulnerabilities. During the current legislative session, legislators have introduced a handful of proposals to address perceived needs related to consolidation.[11]

While consolidation offers many potential benefits for communities served by unreliable water systems, the legal, institutional, financial, and political costs, benefits, information gaps, and best practices associated with consolidations have not been well documented. Taking stock of past and current consolidation efforts—and the lessons they provide—will help accelerate cost-effective solutions for California communities that both address near-term water needs and enhance long-term water system resilience.

B. THE WORKSHOP AND THIS SYNTHESIS DOCUMENT

This document synthesizes the discussions at a daylong workshop held at UC Berkeley on March 5, 2018, aimed at "Learning from Experience with Small Water System Consolidations." The workshop brought together recognized thought leaders in water system management, law, and policy, including key practitioners, academics, stakeholders, and decision makers. The goals of this effort include the following:

1. Identifying what participants perceived as the lessons learned and emerging issues from California's experience to date with small water system consolidations;
2. Raising the level of dialogue among key stakeholders and decision makers who are actively involved with consolidations;
3. Facilitating joint learning and development of shared knowledge among thought leaders in the field;
4. Laying the groundwork for additional dialogue and research; and
5. Informing legislative and administrative agency policies.[12]

The following pages provide a concise summary that reflects the authors' synthesis of a range of viewpoints expressed during the facilitated workshop discussions. The goal of this document is to present participants' perceptions of their experiences and lessons learned, rather than to draft an in-depth research report. While participants were asked to review a draft to ensure that discussions were acurately captured, the factual assertions presented here were not independently vetted for accuracy.

II. Setting the Baseline for Productive Dialogue

Clarifying what is meant by water system consolidation and defining the types of problems consolidation is intended to address is an important first step towards a productive dialogue.

A. WHAT IS CONSOLIDATION?

While consolidation has sometimes been defined narrowly as a larger water system subsuming one or more small water systems, workshop participants favored a relatively broad definition of consolidation that includes a spectrum of collaborative efforts to merge aspects of two or more water systems that provide drinking water for residential use, or to extend drinking water infrastructure and service to communities or households not connected to a publicly regulated system (such as those relying on private domestic wells).

Wastewater system consolidation is an important and closely related issue that was beyond the scope of the workshop.

A Broad Definition of Consolidation

This broad definition encompasses both physical and non-physical consolidations, which may be partial or complete. *Physical consolidations* involve the merging or sharing of physical infrastructure, such as distribution pipelines or water treatment facilities. *Non-physical consolidations* (sometimes described as "*managerial*" or "*operational*") involve sharing financial, managerial or technical capacity, such as through shared billing, equipment sharing, and shared staff or consultants. In practice, consolidations can combine elements of both

Workshop participants described the following scenarios as examples of consolidation:

- A larger water system—or a small water system with greater resources and capacity—subsuming one or more neighboring water systems;
- A water system extending service to one or more neighboring communities that previously relied on private domestic wells; and
- Two or more water systems, including at least one small water system, combining some or all their physical or managerial functions to create additional capacity.

What is Water System Regionalization?

Because the term "regionalization" has been used in policy proposals intended to ease or encourage consolidations (or consolidation-like efforts), workshop discussions touched on the concept of water system regionalization and how it differs, if at all, from consolidation. Some participants described the distinction as based primarily on scale. While some consolidations might involve only two water systems (or one water system and a number of households that previously relied on private domestic wells), water system regionalization involves more than two systems and, potentially, a much larger geographic area, such as an entire county or watershed. In this view, water system regionalization is likely to be more institutionally complex than a two-system consolidation, but their goals and outcomes are functionally similar. On the other hand, some participants suggested that regionalization might involve water partnerships—including joint ventures and formal agreements—that do not undertake the degree of integration generally associated with consolidation. Whether and how these distinctions matter in practice could be explored in more detail in future work.

Participants mentioned the existence of financial incentives for multi-system consolidations. Specifically, consolidations that involve at least three water systems with chronic compliance problems, including at least one disadvantaged community, may be eligible for more state funding than two-system consolidations.

B. WHAT PROBLEMS IS CONSOLIDATION INTENDED TO ADDRESS?

The main driver for consolidation is small water systems' challenges delivering adequate service at a reasonable cost. Small systems may lack the economies of scale needed to support adequate technical, managerial, and financial (TMF) capacity over the long term and to enable cost-effective responses when water quality or quantity challenges arise. These problems are explored briefly below.

The High Costs of Providing Water: Diseconomies of Scale

Like other utilities, domestic water delivery benefits from economies of scale. Larger water systems may be able to provide safe, reliable drinking water at a lower cost per individual customer by spreading capital, operations, and maintenance costs over a larger pool of ratepayers. Because facilities and operating costs do not scale linearly, small systems may need to charge significantly higher rates to provide a comparable level of service. Rates for some small, disadvantaged communities far exceed commonly used affordability thresholds (~1 to 3 percent of median household income).

Inadequate Technical, Mangerial, and Financial Capacity

Due to their higher capital and operational costs per person, small water systems can find it challenging to maintain the TMF capacity necessary to meet critical needs, such as hiring experienced staff, conducting rate studies to determine the true cost of providing water service, or investing in and effectively managing physical infrastructure and other system assets over the long term. Many small systems don't have a full inventory of their assets or the condition of those assets, and may essentially be running their assets to the point of failure because they are unable to maintain or replace them.

Insufficient TMF capacity can create a vicious cycle of instability. Small systems that fall out of compliance with state and federal safe drinking water requirements, especially those serving disadvantaged unincorporated communities, often lack access to public financing or private credit markets. To be eligible for grant funding to come back into compliance, a small system must meet TMF capacity thresholds. Even if a small system receives grant or loan funding to cover one-time capital costs, the system still faces high ongoing costs. Operations and maintenance costs, financial penalties for non-compliance, and debt service payments must still be borne by the system and its ratepayers.

Water Quality and Quantity Challenges

Although larger water systems can also face considerable challenges, small systems may have more difficulty acquiring and maintaining a clean, reliable residential drinking water supply. The challenge is especially acute for small disadvantaged communities that are largely, or entirely, reliant on groundwater, notably in the San Joaquin Valley and Central Coast regions, but likely also in other areas of the state.

A small water system may not be able to remedy water quality problems on its own. Installing and maintaining a treatment system to address contamination or acquiring an alternative, uncontaminated water supply may be cost-prohibitive. The number of small water systems with water quality compliance issues is likely to increase with time. As detection technology continues to improve, very low concentrations of some contaminants are found to be hazardous, and the state sets more stringent water quality standards, more small systems will have difficulty meeting their obligation to provide safe drinking water.

Small water systems that rely on a single source of water and communities that use private domestic wells may have significant water quantity reliability problems. For example, communities that rely on groundwater may see their shallow wells go dry due to groundwater overdraft. Residents of a number of California communities, like East Porterville, faced this problem during the recent drought. They may lack the resources to drill deeper wells, or deeper groundwater may unavailable or contaminated. Groundwater overdraft can also affect water quality by increasing pollutant concentrations. Climate change is expected to increase the frequency and severity of droughts and, with them, of water quantity challenges.

ALTERNATIVES TO CONSOLIDATION

Consolidation can help address problems by making more efficient use of resources, increasing system capacity, and spreading costs over more ratepayers. However, there may be other means of addressing struggling water systems' problems. Participants identified a number of potential alternatives to consolidation. Some (marked "Δ") may overlap with part of the spectrum of actions included in the broad definition of consolidation articulated at the workshop.

Alternatives that may preserve system autonomy:

- Shared services agreements Δ
- Joint use agreements Δ
- Water purchases and exchanges Δ
- Installing point-of-use treatment systems

Alternatives that may override system autonomy:

- Court appointed receiver
- State Water Resources Control Board appointed administrator

Alternatives related to crisis response:

- Mutual aid agreements Δ
- Emergency interties Δ
- Contracts for bottled or hauled water

In some cases, an alternative may preclude the need for consolidation. However, in other cases, an alternative may be an incomplete or interim solution to a small system's long-term problems. These may (or should) eventually lead to more permanent alternative solutions or (further) consolidation efforts.

III. Characterizing Consolidations

There is a range of experience with consolidations in California which, to our knowledge, has not been robustly analyzed. While a systematic examination of consolidation is beyond the scope of this project, we solicited information from workshop participants about their experiences with consolidation through an informal survey exercise and facilitated discussion. This included information about (1) what consolidation efforts the participants and their organizations have been involved with, (2) what factors have influenced, or should inform, consolidations, and (3) how consolidations have been or could be structured.

Through the informal survey exercise, participants provided information on ~130 examples of water system consolidation efforts. Of these, participants characterized ~62% as past efforts, ~14% as in process efforts, ~22% as potential efforts, and ~2% as failed efforts (**Figure 1**). There are likely many other consolidation efforts workshop participants did not have direct knowledge of.

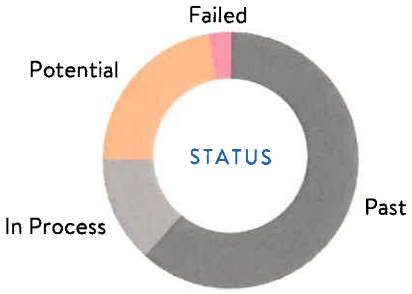

Figure 1: Status of the consolidations identified by workshop participants

A. WHAT FACTORS INFLUENCE THE NEED FOR, TYPE, PROCESS, AND DETAILS OF CONSOLIDATION EFFORTS?

Many factors can influence consolidations, how they come about, and how they are structured. Participants emphasized that there is no unifying factor driving all consolidations. The nature and structure of a consolidation will depend on local conditions and the needs and concerns of the parties, which may change over time.

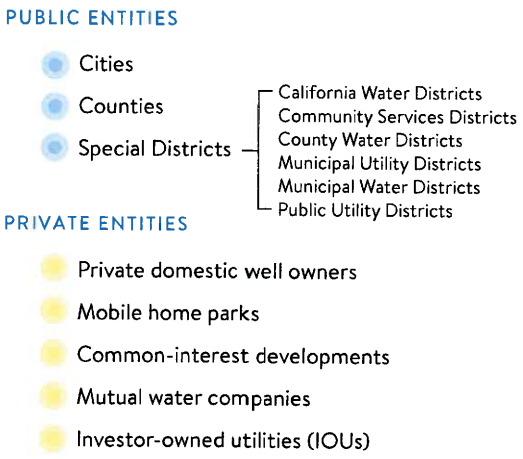

Figure 2: Types of entities that own water systems and infrastructure which may be involved in consolidations

Water System / Infrastructure Ownership

The water systems and infrastructure involved in consolidations may be owned by public or private entities (**Figure 2**). These different forms of ownership bring with them different authorities, constraints, opportunities, and incentives that may be relevant to consolidation.

For example, state tax policy (set by three voter initiatives—Propositions 13, 218, and 26—that amended the California Constitution) limits local governments' ability to increase fees and redistribute revenue. As a result, the rates a public agency-owned water system charges must not exceed the proportional costs of the water service attributable to the parcel. It cannot subsidize low-income customers by charging other customers higher rates for the same level of service, which may reduce the affordability of consolidations for low-income individuals and communities.

Mutual water companies are user-owned, non-profit water companies that, except for limited exceptions, provide water only to their shareholders/members. Investor-owned utilities (IOUs) are for-profit water corporations that are regulated by the California Public Utilities Commission. Some large IOUs have multiple service areas located across the state. Unlike public agencies, they can redistribute rate revenues between service areas and customers, for example, to fund low-income ratepayer assistance programs. Future research could explore relevant authorities, constraints, opportunities, and incentives for each type of water system ownership.

Participants characterized the majority (~61%) of the consolidation efforts they identified through the informal survey exercise as involving some combination of public and private entities (including private domestic well owners), ~23% as involving only public entities, and ~16% as involving only private entities (**Figure 3**).

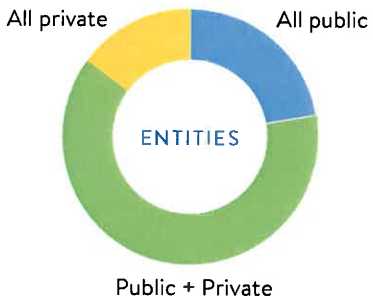

Figure 3: Types of entities involved in the consolidations identified by workshop participants

Other Water System and Community Characteristics

Other characteristics of the entities involved in a consolidation play an important role in determining the utility and feasibility of different consolidation options. These include:

- Water system size / population served
- Proximity to potential partners
- Urban or rural nature of communities, including:
  - Whether they are incorporated or not
  - Community history
- Source(s) of water supply
- Prevalence of private domestic wells
- Type and scope of water quality problem(s)
- Type and scope of water quantity problem(s)
- Local hydrology
- County and city land-use practices
- Degree of engagement in local planning
- History of crises
- Financial capacity, including:
  - Existing liabilities
  - History of underinvestment
- Technical capacity
- Managerial capacity
- Social characteristics, such as:
  - Community cohesion / social capital
  - Race, ethnicity, and class composition
  - Presence of disadvantaged communities

Affected Parties and Their Concerns

Although consolidation affects a wide variety of parties with differing interests, participants indicated that the following groups tend to be particularly active in the consolidation space: residents of the affected community and the receiving community; water system boards, staff, consultants, and customers; mutual water companies; IOUs; local governments, including cities, counties, special districts, and groundwater sustainability agencies; Local Agency Formation Commissions (LAFCos); and state agencies, including the State Water Resources Control Board, California Public Utilities Commission, and Department of Water Resources.

These parties may have specific concerns that make some consolidation options appear more or less attractive to them. Although some of those concerns may be addressed or mitigated by the way a consolidation is structured, others may persist. We explore parties' concerns in more detail in the next section.

Funding Availability, Access to Credit, and Incentives

Funding and funding-related incentives are important determinants of whether and how consolidations occur. For example, certain funding sources include grant funding that can only be used for consolidations involving a disadvantaged community, and water systems can double their funding if three or more water systems merge. Nonetheless, some participants suggested that the State's

dollar-based caps on total project funding can drive down the size of a consolidation, leading proponents to split larger consolidation projects into smaller pieces that fit under the cap and significantly increasing the transaction costs of consolidation. And, critically, state tax policy restricts local governments' ability to raise the rates they charge their customers—an issue that privately owned water systems do not share—limiting these public agencies' ability to raise capital.

Legacy of Discrimination

Where a legacy of discrimination and underinvestment exists, it affects a community's need for, capacity to pursue, and ability to afford consolidation. Participants identified this factor as critically important for understanding why some small systems, especially those serving disadvantaged communities, are in the positions they are in today. Many small disadvantaged communities, and the water systems that serve them, face challenges which result from decades of racially discriminatory land use practices and systematic underinvestment, some of which has been documented in legal proceedings, and which may continue today. Historical and ongoing discrimination have salience for how the state should prioritize current and future investments of resources, what institutional arrangements and structures may be preferable, and other issues relevant to consolidation.

Crises

Participants pointed out that crises that expose water system weaknesses can provide strong motivation for consolidation by demonstrating—and, sometimes, creating—a clear need for action. For example, in parts of the San Joaquin Valley during the drought, hundreds of domestic wells went dry. The scale of East Porterville's crisis led to rapid state action to provide emergency drinking water and relatively rapid state action to extend water service from the neighboring City of Porterville. Similarly, after a massive wildfire destroyed several water systems' infrastructure in Lake County, small water systems and communities that had previously shied away from consolidation recognized the need for it when faced with the high cost of rebuilding those water systems.

B. HOW HAVE CONSOLIDATIONS BEEN STRUCTURED?

Consolidations have been implemented through a spectrum of institutional arrangements and structures. Participants emphasized that consolidation possibilities should be considered fluidly, as a continuum. Over-defining or over-categorizing possibilities could lead decision makers to overlook potentially useful options or combinations of options. Among the possibilities participants mentioned were Joint Powers Agreements / Authorities / Agencies (JPAs) to study regional solutions, mutual aid agreements, arrangements for shared bookkeeping and billing or shared operations staff, water exchanges or wholesale agreements, emergency interties, shared treatment plants, annexation of unincorporated areas into cities, extraterritorial service agreements, and water system purchases. There are many different ways to think about these structures. We present two potential models, based around the workshop discussions, here.

As Part II.A suggests, one way to differentiate consolidations is on the basis of their functionality. In other words: Do they involve the merging of managerial functions and capacity, physical functions and capacity, or some combination of both? Participants characterized the consolidation efforts they identified through the informal survey as ~8% managerial, ~20% physical, and ~73% a combination of the two (**Figure 4**).

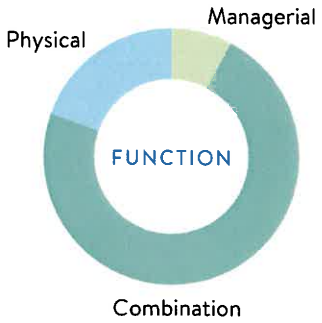

Figure 4: Functions of the consolidations identified by workshop participants

Figure 5 illustrates how the institutional arrangements and structures listed above might be organized by function.

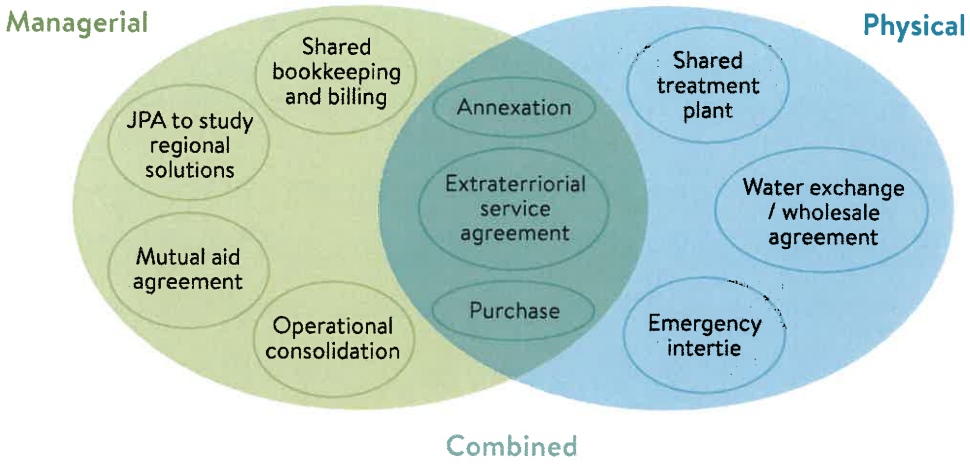

Figure 5: Variation in the function of institutional arrangements and structures

Participants also discussed how different institutional arrangements and structures might affect the degree of autonomy retained by a small water system's users following consolidation. **Figure 6** illustrates how the institutional arrangements and structures shown in **Figure 5** might be organized by degree of retained autonomy. For example, mutual aid agreements for emergency assistance may increase system resilience and reliability while allowing community members to maintain a relatively high degree of control over the day-to-day operations of their water system, as well as direct access to their water provider. But community members' decision-making ability in those contexts may be constrained by resource limitations and other factors. Conversely, small systems that merge with a city, a water district, a mutual water company, or an IOU may lose local control over their water system or be far removed from their water provider's corporate offices. Different aspects of autonomy may be affected by consolidation, and how to manage tradeoffs between them is an important question.

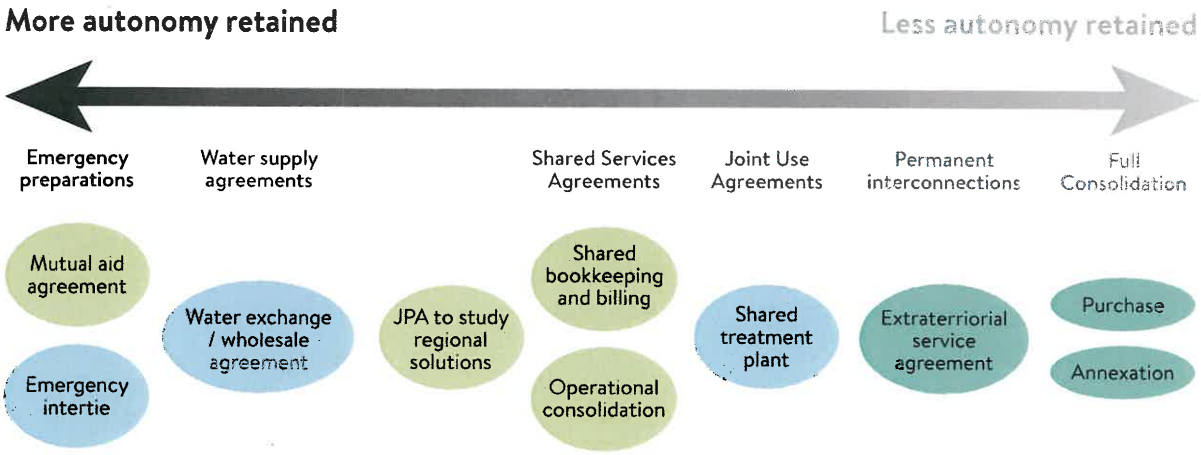

Figure 6: Variation in the degree of autonomy retained by small water system users for different institutional arrangements and structures

IV. Identifying Barriers to Effective Consolidations and Potential Solutions

A range of barriers can make pursuing consolidations, and implementing them effectively, challenging. These include information gaps, changing regulatory standards, challenges associated with affordability and funding, distance, resistance from different sectors, the state preference for full consolidation, the length and complexity of the consolidation process, and the scope and use of the State Water Resources Control Board's authority to mandate consolidation.

Participants considered ways to address some of these barriers by translating their experience with small water system consolidations into potential solutions.

A. INFORMATION GAPS

There are many information gaps associated with consolidations. Examples mentioned by participants included the following:

- A lack of available data needed to understand the scope of drinking water quality and quantity problems for private domestic wells and some state small water systems, such as information about the distribution of private domestic wells that do not meet drinking water standards or are at risk of going dry during a drought;
- A lack of data on water rates and affordability;
- A lack of information about the benefits of consolidations, such as information about changes in property value associated with addressing water problems, the cost-savings associated with managerial consolidations, improved reliability for receiving systems related to increased capacity / redundancy, and the long-term health benefits of addressing drinking water contaminants; and
- A lack of information about how different consolidation arrangements and structures may affect the autonomy retained by small water system users.

POTENTIAL SOLUTIONS FOR INFORMATION GAPS

- Gather and organize existing data sets for private domestic wells (e.g., location, depth, water levels, and water quality).
- Require periodic water quality testing of private domestic wells, targeting contaminants of local concern.
- Analyze the long-term costs and benefits of different types of consolidations to receiving systems, subsumed systems, cooperating systems, and the state. E.g.:
  - Analyze pre- and post-consolidation water rates, water affordability, and property values.
  - Analyze cost-savings and other benefits of managerial consolidations.
  - Evaluate the benefits of improved reliability for receiving systems.
  - Estimate the long-term health benefits of consolidations.
  - Estimate avoided emergency water costs.
  - Quantify the costs of private domestic well ownership, operation, and maintenance.
- Analyze how the degree of autonomy small water system users retain differs for different consolidation arrangements and structures.

B. CHANGING REGULATORY STANDARDS

Changing standards for drinking water quality affect the number of small water systems that are out of compliance. For example, California's standard for Chromium-6 was challenged in state court and invalidated for failure to consider economic feasibility. A similar challenge has been filed against the State's recently adopted standard for 1,2,3-trichloropropane. After the Chromium-6 standard was invalidated, hundreds of non-compliant systems immediately became compliant systems. There is significant uncertainty surrounding the standards water systems will be held to, which has implications for which water systems could be subject to mandatory consolidation orders and makes it more difficult for small systems to pursue consolidation efforts.

Safeguarding public health is crucial and is a central potential benefit of consolidation. Participants emphasized that systems with high contaminant treatment costs need state-level programming and funding to help them come into compliance with new water quality standards. They suggested that the state consider how to effectively remedy noncompliance in concert with developing new or more stringent drinking water standards.

POTENTIAL SOLUTION FOR CHANGING REGULATORY STANDARDS

- Proactively roll out a targeted consolidation funding strategy as part of the implementation plan for new stringent drinking water standards.

C. AFFORDABILITY AND FUNDING CHALLENGES

Affordability and the availability of external funding are potential barriers to consolidation.

Water Rate and Affordability Issues

As **Part III.A** mentioned, participants noted that California voters have amended the state constitution to place limits on public water agencies' ability to redistribute rate revenues across the communities and customers within their jurisdictions. Local government providers cannot charge water customers more than the cost attributable to providing water service to them, including maintaining a reasonable reserve fund. Chronically underfunded water systems run by public entities face additional challenges because they may not be able to afford to conduct the rate studies that would demonstrate need and justification for raising their (artificially) low water rates to reflect the true costs of providing reliable water service.

Receiving systems may have significant leverage in consolidation negotiations, and sometimes charge customers from a subsumed system excessive rates. Participants described some cities as charging customers from subsumed systems rates that are 150% of those they charge their existing city customers, sometimes failing to draw a clear connection between the actual costs to the city of providing the service and the higher rate. Furthermore, cities' cost analyses may not properly account for the assets and liabilities of a subsumed system.

There may be large differences in what rates are affordable in different regions and for different populations within a particular region, and merging these populations together under a single system may result in unaffordable rates for disadvantaged communities, potentially changing the calculus of which potential solutions are likely to be the most cost-effective. For example, managerial consolidations may be effective, more affordable options than full consolidations in some cases.

POTENTIAL SOLUTIONS FOR WATER RATE AND AFFORDABILITY ISSUES

- Develop methods and metrics to represent the distribution of benefits and burdens of consolidation in a systematic and fair way.
- Perform a comparative analysis of the financial authorities, constraints, opportunities, and incentives relevant to consolidation for each type of public or private water system ownership.
- Explore the possibility of a legislative change to the statutory definitions applicable to Proposition 218 that would deem water rates not to have increased when higher charges are required to implement a public health and safety requirement.
- Consider affordability when selecting consolidation structures.
- Ensure that receiving systems charge newly consolidated customers rates that reasonably reflect the costs of serving them, for example, by including a "social equity" clause in consolidation agreements that preserves community and public participation, prevents unregulated privatization, and establishes rate protections.
- Phase in rate increases related to consolidation over time, rather than all at once.

Grant and Loan Issues

Given the need to address legacy infrastructure deficits in many small systems, the limited availability of funding to support consolidation efforts is a central issue. For example, the most significant recent water infrastructure bond, Proposition 1, includes funding for technical assistance for consolidations involving physical infrastructure (most of which has already been distributed or is already spoken for), but it does not allow systems to use technical assistance funds to improve TMF capacity— for example, through a managerial consolidation—unless there is an accompanying Prop 1 eligible construction project.

Beyond the lack of funding available for consolidation efforts, there are a host of funding-related issues. For example, disadvantaged communities in unincorporated areas may lack the managerial capacity to apply for and manage grants and loans, be unable to convince elected officials or qualifying agencies to apply for grants on their behalf, or may be unable to access public and private financing due to their lack of credit and collateral. Lack of access to credit is an especially acute problem for public entities that manage water systems, which may find it challenging to raise their rates to pay up front for system improvements.

Furthermore, funding often hinges on a system having sufficient TMF capacity, a classic catch-22 that can preclude efforts to build the necessary capacity in the first place. Furthermore, a system's eligibility status can change between the time it applies for funding and when funding becomes available. The risk of falling out of eligibility is exacerbated by the long, multi-step process usually followed for consolidations.

POTENTIAL SOLUTIONS FOR GRANT AND LOAN ISSUES

- Develop a proactive state plan to build capacity and target funding to solve drinking water problems in communities that have experienced historical underinvestment.
- Modify grant guidelines to include a clear definition of TMF capacity designed to support desired outcomes.
- Provide technical assistance funding for managerial consolidations.
- Pursue funding from sources less commonly used for consolidations, such as Federal Emergency Management Agency hazard mitigation funds or Integrated Regional Water Management funding.
- Create sustained, state-level funding sources for addressing drinking water quality problems, such as taxes and fees on the use of common water pollutants like fertilizers and pesticides.
- Expand permanent low-interest loan programs, like the State Revolving Funds, to increase ongoing funding.
- Authorize the State Water Resources Control Board to require regionalization of small, chronically out of compliance public water systems and to collect fees to support it.
- Analyze what factors affect the ability of different types and sizes of public and private entities to raise capital.

D. DISTANCE

As a rule of thumb, physical consolidations are generally only considered cost-effective for water systems within 3 miles of one another. In practice, the limit is closer to 1 mile, because the maximum project grant limits for current state funding programs will not accommodate the expense of long distance physical connections.

But proximity is not just an issue for physical infrastructure connections. It is also a concern for managerial consolidations. These consolidations require staff or consultants to travel between the systems they manage. Participants suggested that driving times of more than one hour reduce the productivity and efficiency gains of managerial consolidation.

POTENTIAL SOLUTIONS RELATED TO DISTANCE

- Expand UC Davis' study (which found that 66% of San Joaquin Valley disadvantaged communities were within 500 feet, and 85% were within 3 miles, of a compliant system) to the whole state.
- Explore consolidation possibilities with a wider variety of IOUs and mutual water companies, which may provide opportunities for creative managerial consolidations and have access to different funding sources than water systems owned by public entities.

E. RESISTANCE FROM DIFFERENT SECTORS

As noted above, the many parties affected by consolidation will have different concerns about consolidation. These concerns may manifest as resistance to consolidation in general, or to certain consolidation options. Participants discussed the following sources of potential resistance: (1) resistance from small systems and their residents, (2) resistance from receiving systems and their residents, and (3) resistance from consultants and contractors.

Resistance from Small Systems and Their Residents

Resistance to consolidation efforts by small water systems and the communities they serve may derive from a number of sources, including lack of knowledge about (1) the water quality problems facing the system and community and the effect of those problems on residents' health and safety, (2) the condition of the system's infrastructure and the cost of maintenance or repair, and (3) artificially low rates that haven't covered the costs of infrastructure maintenance or replacement and the true costs of managing a sustainable water system over the long term, which can result in sticker shock. Other concerns relate to the effect consolidation could have on community land uses, the likelihood of increased enforcement attention, and a lack of representation and accountability in the receiving system.

Additionally, individual interests may be at odds with community needs, such as the desire of a water system's board and staff to keep their jobs, or landlords who don't want to pay for improvements that they see as primarily benefitting their tenants.

POTENTIAL SOLUTIONS FOR RESISTANCE FROM SMALL SYSTEMS AND THEIR RESIDENTS

- Allow community members to petition the State Water Resources Control Board for consolidation with a compliant system.
- Provide community members with specific, relevant information about why consolidation may be helpful and why and how water rates would change after consolidation.
- Ensure representation and/or involvement of subsumed communities (e.g., by maintaining the board of a subsumed water system as an advisory body, by adding representatives of the subsumed community to the board of the receiving system, etc.).

Resistance from Receiving Systems and Their Residents

Receiving systems and their residents may resist consolidation efforts for various reasons. For example, they may be reluctant to take on the debt, tax liability, or non-compliance penalties that a small system may have accrued. Participants noted that receiving systems and their residents often perceive a small system's non-compliance as "someone else's problem," and that the receiving community may believe it should not have to "subsidize others" who did not take care of or invest in their water system. Receiving systems and their residents may also assume, sometimes accurately, that disadvantaged community residents will be unable to pay their bills. These perceptions and assumptions may rest in part on the idea that poverty is the result of failure to take responsibility instead of the result of a legacy of underinvestment. They may also rely on certain assumptions about the benefits and burdens associated with consolidation that do not necessarily bear out.

POTENTIAL SOLUTIONS FOR RESISTANCE FROM RECEIVING SYSTEMS AND THEIR RESIDENTS

- Articulate the costs and benefits (e.g., increasing local water security, improving economies of scale, etc.) of consolidation to receiving systems.
- Require cities and counties to create plans to ensure access to safe, affordable drinking water in their communities, and tie plan implementation to state funding incentives.
- Introduce additional liability protections for receiving systems in consolidations.

Resistance from Consultants and Other Contractors

Consultants that currently contract to provide services to multiple water systems may prefer to maintain those separate contracts in order to maximize their personal income. This potential individual conflict of interest might motivate contractors to counsel their clients against consolidation, even when consolidation may be in the best interest of the system and its residents.

F. STATE PREFERENCE FOR FULL CONSOLIDATION

Participants noted that state programs tend to prioritize or incentivize full consolidations. For example, technical assistance funding from Proposition 1 must be tied to a construction project, even though a managerial consolidation may be sufficient and much more cost-effective, or may be a cost-effective stepping stone on the road to full consolidation.

At the same time, participants noted that partial solutions (using a "Band-aid" approach)—for example constructing an intertie—may reduce incentives to resolve underlying problems, such as failing or inadequate infrastructure like wells or treatment facilities.

POTENTIAL SOLUTION FOR ADDRESSING THE ISSUE OF STATE PREFERENCE FOR FULL CONSOLIDATION

- Provide funding for technical assistance related to managerial consolidations.

G. LENGTH AND COMPLEXITY OF THE CONSOLIDATION PROCESS

Even when all parties are willing to consolidate, participants noted that consolidations are generally long, multi-phase processes that require working through many different layers of bureaucratic red-tape and approvals. It takes time and resources to obtain state permits and funding, comply with systems' internal rules to authorize consolidation, obtain LAFCo approvals, etc. The process is difficult and often overwhelming for small systems that lack TMF capacity to move through these steps quickly and efficiently.

Notably, the City of Porterville's extension of service to East Porterville residents navigated bureaucratic approvals relatively quickly during and after the recent drought. Participants suggested that the central role the State played throughout that effort, and the State's ability to work with community organizations to deal directly with East Porterville residents—likely sped up and streamlined the process in this case, though it has still been a multi-year project.

Many consolidations have been successful without the State playing such central role, especially where the parties have brought their issues and concerns to the table and worked collaboratively to resolve them.

POTENTIAL SOLUTIONS FOR THE LENGTH AND COMPLEXITY OF THE CONSOLIDATION PROCESS

- Provide funding for legal services needed to navigate the consolidation process.
- Explore ways to streamline the consolidation process and speed up funding agreements.

H. SCOPE AND USE OF MANDATORY CONSOLIDATION AUTHORITY

Participants noted that the State Water Resources Control Board has made relatively limited use of its mandatory consolidation authority so far. Some suggested that the scope of the Board's current authority is too limited to address many important situations that may benefit from consolidation; for example, providing water to schools. There seemed to be a near consensus that the Board should be more aggressive in using its mandatory consolidation power where there has been historic underinvestment or significant tension between the presumptive receiving system and the non-compliant system and voluntary consolidation is not occurring.

POTENTIAL SOLUTION FOR ADDRESSING THE SCOPE AND USE OF THE MANDATORY CONSOLIDATION AUTHORITY

- Expand the scope of the State Water Resources Control Board's mandatory consolidation power to include currently excluded systems and communities, such as schools.

V. Looking Forward

The discussions encapsulated in this document suggest there is much to be learned from experience with small water system consolidations. These discussions can begin to inform current and future policy proposals, suchs as proposed legislation, that are intended to address barriers and provide new tools for consolidations.

Legislators have introduced multiple bills related to consolidation this session, but the proposals are not necessarily well-coordinated with one another, and they address a narrow subset of the relevant issues and concerns participants explored in the workshop. The potential solutions offered by participants can serve as a useful starting point for further policy discussions. **Table 1** suggests which types of entities might be well suited to help implement those solutions.

This project lays the groundwork for continuing constructive and inclusive dialogue among stakeholders and decision makers, as well as for a future research agenda that targets key information gaps.

Additional work can build on this initial effort by bringing together more strands of dialogue in a structured way that facilitates further learning and cross-pollination of ideas. Workshop participants emphasized that future conversations should include additional voices and perspectives that were not included in the workshop due to time and space constraints. These include community members who have been or will be affected by consolidations and representatives of various organizations, including public agencies (e.g., cities and counties that have experienced or are considering consolidations, city and county planners, LAFCOs, groundwater management agencies, additional special districts, and the Department of Water Resources), public and private entities involved with Integrated Regional Water Management, mutual water companies, the Association of California Water Agencies (ACWA), taxpayer groups, private sector industries (including the construction, agricultural, and chemical industries), and Chambers of Commerce.

Table 1: Summary of potential solutions participants offered for addressing barriers to effective consolidations, highlighting potential implementers (researchers, local entities, state agencies, and the state legislature)

BARRIERS	POTENTIAL SOLUTIONS	RESEARCHERS	LOCAL ENTITIES	STATE AGENCIES	LEGISLATURE
INFORMATION GAPS	Gather and organize existing data sets for private domestic wells (e.g., location, depth, water levels, and water quality).	○		○	
	Require periodic water quality testing of private domestic wells, targeting contaminants of local concern.			○	○
	Analyze the long-term costs and benefits of different types of consolidations to receiving systems, subsumed systems, cooperating systems, and the state (see Part IV.A for specifics).	○			
	Analyze how the degree of autonomy small water system users retain differs for different consolidation arrangements and structures.	○			

BARRIERS	POTENTIAL SOLUTIONS	RESEARCHERS	LOCAL ENTITIES	STATE AGENCIES	LEGISLATURE
CHANGING REGULATORY STANDARDS	Proactively roll out a targeted consolidation funding strategy as part of the implementation plan for new stringent drinking water standards.			○	○
WATER RATE & AFFORDABILITY ISSUES	Develop methods and metrics to represent the distribution of benefits and burdens of consolidation in a systematic and fair way.	○			
	Perform a comparative analysis of the financial authorities, constraints, opportunities, and incentives relevant to consolidation for each type of public or private water system ownership.	○			
	Explore the possibility of a legislative change to the statutory definitions applicable to Proposition 218 that would deem water rates not to have increased when higher charges are required to implement a public health and safety requirement.	○	○		○
	Consider affordability when selecting consolidation structures.		○	○	
	Ensure that receiving systems charge newly consolidated customers rates that reasonably reflect the costs of serving them, for example, by including a "social equity" clause in consolidation agreements that preserves community and public participation, prevents unregulated privatization, and establishes rate protections.		○	○	
	Phase in rate increases related to consolidation over time, rather than all at once.		○		
GRANT & LOAN ISSUES + STATE PREFERENCE FOR FULL CONSOLIDATION	Develop a proactive state plan to build capacity and target funding to solve drinking water problems in communities that have experienced historical underinvestment.			○	○
	Modify grant guidelines to include a clear definition of TMF capacity designed to support desired outcomes.			○	○
	Provide technical assistance funding for managerial consolidations.			○	○
	Pursue funding from sources less commonly used for consolidations, such as Federal Emergency Management Agency hazard mitigation funds or Integrated Regional Water Management funding.		○	○	
	Create sustained, state-level funding sources for addressing drinking water quality problems, such as taxes and fees on the use of common water pollutants like fertilizers and pesticides.				○
	Expand permanent low-interest loan programs, like the State Revolving Funds, to increase ongoing funding.				○

BARRIERS	POTENTIAL SOLUTIONS	RESEARCHERS	LOCAL ENTITIES	STATE AGENCIES	LEGISLATURE
GRANT & LOAN ISSUES (continued)	Authorize the State Water Resources Control Board to require regionalization of small, chronically out of compliance public water systems and to collect fees to support it.				○
	Analyze what factors affect the ability of different types and sizes of public and private entities to raise capital.	○			
DISTANCE	Expand UC Davis' study (which found that 66% of San Joaquin Valley disadvantaged communities were within 500 feet, and 85% were within 3 miles, of a compliant system) to the whole state.	○			
	Explore consolidation possibilities with a wider variety of IOUs and mutual water companies, which may provide opportunities for creative managerial consolidations and have access to different funding sources than water systems owned by public entities.		○	○	
RESISTANCE FROM SMALL SYSTEMS & THEIR RESIDENTS	Allow community members to petition the State Water Resources Control Board for consolidation with a compliant system.			○	○
	Provide community members with specific, relevant information about why consolidation may be helpful and why and how water rates would change after consolidation.	○	○	○	
	Ensure representation and/or involvement of subsumed communities (e.g., by maintaining the board of a subsumed water system as an advisory body, by adding representatives of the subsumed community to the board of the receiving system, etc.).		○		
RESISTANCE FROM RECEIVING SYSTEMS & THEIR RESIDENTS	Articulate the costs and benefits (e.g., increasing local water security, improving economies of scale, etc.) of consolidation to receiving systems.	○	○	○	
	Require cities and counties to create plans to ensure access to safe, affordable drinking water in their communities, and tie plan implementation to state funding incentives.			○	○
	Introduce additional liability protections for receiving systems in consolidations.				○
LENGTH & COMPLEXITY OF CONSOLIDATION PROCESS	Provide funding for legal services needed to navigate the consolidation process.				○
	Explore ways to streamline the consolidation process and speed up funding agreements.	○	○	○	○
SCOPE & USE OF MANDATORY CONSOLIDATION AUTHORITY	Expand the scope of the State Water Resources Control Board's mandatory consolidation power to include currently excluded systems and communities, such as schools.				○

Related Reading and Resources

California Senate Bill 88 (2014).

California Senate Bill 244 (2011).

Larry Lai, Luskin Ctr. for Innovation, Adopting County Policies which Limit Public Water System Sprawl and Promote Small System Consolidation (2017), *available at* http://innovation.luskin.ucla.edu/content/adopting-county-policies-which-limit-public-water-system-sprawl-and-promote-small-system-con.

Jonathan London, Amanda Fencl, Sara Watterson, Jennifer Jarin, Alfonso Aranda, Aaron King, Camille Pannu, Phoebe Seaton, Laurel Firestone, Mia Dawson & Peter Nguyen, U.C. Davis Ctr. for Reg'l Change, The Struggle for Water Justice in California's San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities (2018), *available at* https://regionalchange.ucdavis.edu/publication/water-justice.

Debra Martin, *Regionalization: A Potential Solution to Affordability and Capacity Issues of Small Systems*, Rural Matters, Summer 2009, at 8, *available at* https://rcap.org/wp-content/uploads/2016/01/RuralMatters-Summer2009-1.pdf.

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State Water Res. Control Bd., State of California Clean Water State Revolving Fund and the Water Quality, Supply, and Infrastructure Improvement Act of 2014 Intended Use Plan: State Fiscal Year 2017–18 (June 20, 2017), *available* at http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/cwsrf_iup_sfy2017_18_final.pdf.

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U.S. Envtl. Prot. Agency, System Partnership Solutions to Improve Public Health Protection, vol. II (2006), *available at* https://www.epa.gov/sites/production/files/2017-07/documents/p100399z.pdf.

Endnotes

1 Cal. Water Code § 106.3.

2 The California Water Code defines a "disadvantaged community" as "a community with an annual median household income that is less than 80 percent of the statewide annual median household income." Cal. Water Code § 79505.5(a); *see also* Cal. Pub. Res. Code § 75005(g). A "disadvantaged unincorporated community" is "a fringe, island, or legacy community in which the median household income is 80 percent or less than the statewide median household income." Cal. Gov't Code § 65302.10(a).

3 *See* State Water Res. Control Bd., Frequently Asked Questions on Mandatory Consolidation or Extension of Service for Water Systems, at 1 (last updated Nov. 7, 2016), *available at* https://www.waterboards.ca.gov/drinking_water/programs/compliance/docs/fs082415_mand_consolid_faq.pdf.

4 There are a number of different statutory definitions for small water systems. For example, the federal Safe Drinking Water Act defines "small systems" as "public water systems serving 10,000 or fewer persons." 42 U.S.C. § 300j-12(g)(2)(C). However, a "[s]tate small water system . . . serves at least five, but not more than 14, service connections and does not regularly serve drinking water to more than an average of 25 individuals daily for more than 60 days out of the year." Cal. Health & Safety Code § 116275(n).

5 *See* Darrin Polhemus, State Water Res. Control Bd., Water Partnerships and Consolidation 5 (Aug. 17, 2017), *available at* https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/wpc_events/swrcb_drinking_water_and_financial_assistance_presentation.pdf (attributing 80% of California drinking water violations to very small systems that serve between 25 and 500 people, and less than 8% to systems serving between 25 and 3,300 people); State Water Res. Control Bd., Summary of Public Water System Exceedance / Compliance Status (Mar. 13, 2018), *available at* https://www.waterboards.ca.gov/water_issues/programs/hr2w/docs/data/hr2w_web_data_summary_20180313.xls (spreadsheet file).

6 State Water Res. Control Bd., Notice of Workshop and Notice of Opportunity for Public Comment, Joint Workshop of the California Public Utilities Commission and State Water Resources Control Board: Providing Safe Drinking Water Through Consolidation of Water Systems and SB 623, at 1 (Nov. 3, 2017), *available at* https://www.waterboards.ca.gov/board_info/calendar/docs/notice_joint_wrkshp_safe_dw_111317.pdf.

7 *See* Jonathan London, Amanda Fencl, Sara Watterson, Jennifer Jarin, Alfonso Aranda, Aaron King, Camille Pannu, Phoebe Seaton, Laurel Firestone, Mia Dawson & Peter Nguyen, U.C. Davis Ctr. for Reg'l Change, The Struggle for Water Justice in California's San Joaquin Valley: A Focus on Disadvantaged Unincorporated Communities 13–14 (2018), *available at* https://regionalchange.ucdavis.edu/publication/water-justice.

8 *See* Larry Lai, Luskin Ctr. for Innovation, Adopting County Policies which Limit Public Water System Sprawl and Promote Small System Consolidation 16–17, 17 tbl.3 (2017), *available at* http://innovation.luskin.ucla.edu/content/adopting-county-policies-which-limit-public-water-system-sprawl-and-promote-small-system-con (identifying 106 past or ongoing consolidation projects that have eliminated, or could potentially eliminate, 177 water systems).

9 Several participants noted that small water systems may not be able to afford the high cost of treatment needed to meet more rigorous drinking water standards. *See also* Maura Allaire, Haowei Wu & Upmanu Lall, *National Trends in Drinking Water Quality Violations*, 115 Proc. Nat'l Acad. Sci. 2078, 2081, 2082 (2018), *available at* http://dx.doi.org/10.1073/pnas.1719805115.

10 *See* Cal. Dep't Water Res., California Water Plan, Update 2013, at 3-10, 3-58, 3-59 (2014), *available at* https://www.water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/California-Water-Plan/Water-Plan-Updates/Files/Update-2013/Water-Plan-Update-2013-Volume-1.pdf; *see also* Minxue He, Mitchel Russo & Michael Anderson, *Hydroclimatic Characteristics of the 2012–2015 California Drought from an Operational Perspective*, Climate, Mar. 2017, art. 5, at 17, *available at* https://doi.org/10.3390/cli5010005; Henry Fountain, *In a Warming California, a Future of More Fire*, N.Y. Times, Dec. 7, 2017, *available at* https://www.nytimes.com/2017/12/07/climate/california-fires-warming.html.

11 *See* California Assembly Bill 2050, Small System Water Authority Act of 2018 (Caballero); California Assembly Bill 2339, Water utility service: sale of water utility property by a city (Gipson); California Assembly Bill 2501, Drinking water: consolidation and extension of service (Chu); California Senate Bill 1215, Drinking water systems and sewer systems: consolidation and extension of service (Hertzberg).

12 Note that the workshop did not analyze specific proposals, and it is not the purpose of this document to adress them directly.

About the Authors

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About CLEE

The Wheeler Water Institute develops interdisciplinary solutions to ensure clean water for California. Established in 2012 at the Center for Law, Energy & the Environment (CLEE) at Berkeley Law, the Institute conducts projects at the intersection of law, policy, and science.

The Center for Law, Energy & the Environment (CLEE) at Berkeley Law educates the next generation of environmental leaders and develops policy solutions to pressing environmental and energy issues. CLEE's current initiatives focus on reducing greenhouse gas emissions, advancing the transition to renewable energy, and ensuring clean water for California's future.

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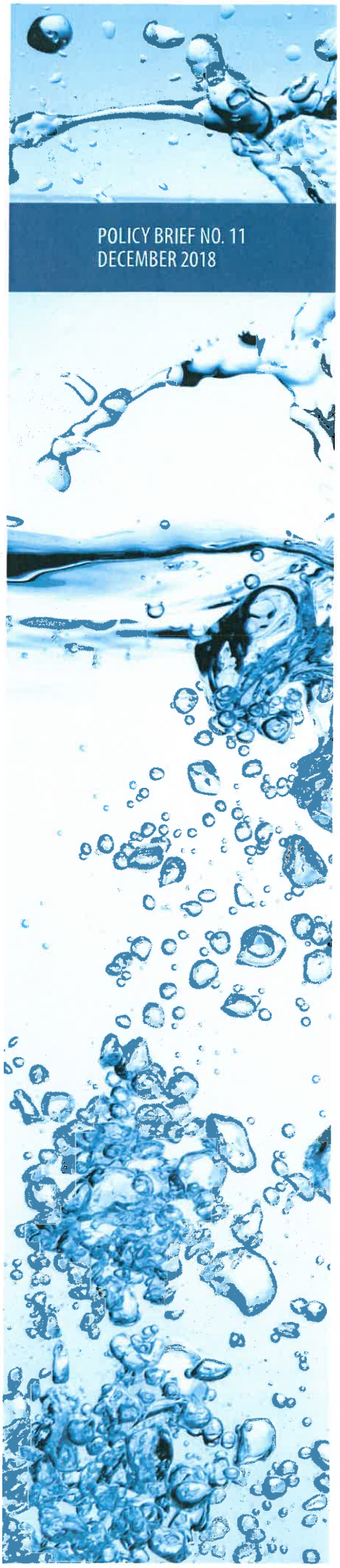

POLICY BRIEF NO. 11
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Pritzker Briefs
PRITZKER ENVIRONMENTAL LAW AND POLICY BRIEFS

Ensuring Safe Drinking Water In Los Angeles County's Small Water Systems

By Nathaniel Logar, James Saizman, and Cara Horowitz

Executive Summary

Small water systems in Los Angeles County face difficult challenges in providing safe and affordable drinking water to customers. These include limited financial and personnel resources as well as reduced access to alternative water sources. Small water systems are particularly vulnerable to groundwater contamination and often struggle with regulatory compliance. As a result, they have a higher percentage of water quality problems and higher rates of noncompliance than larger systems. The lack of economies of scale often means that consumers pay more for water from small systems than from larger systems. Despite state efforts to provide funding and management assistance for small systems, small water systems often struggle with acquiring grants and loans, especially for operations and maintenance.

L.A. County's small water systems face their own specific challenges. There is enormous variation in the characteristics and capabilities of county water service providers, with over half of the county's systems serving 10,000 or fewer people. Those smaller systems more frequently rely on groundwater, which in L.A. County is often contaminated, requiring expensive treatment before the water is drinkable. Additionally, lead contamination from both pipes and industrial contaminants can be a problem for many of the county's small water systems.

Most of the challenges small water systems face are predominantly funding problems. Small water systems that struggle with water quality compliance or with reliability and affordability are often also undercapitalized entities. California thus needs not only to ensure adequate levels of funding, but to target funding and policy mechanisms so they meaningfully address the specific problems smaller systems face.

We recommend three approaches. First, the state should improve data collection and dissemination specifically targeting (1) water quality of small water systems; (2) water pricing and customer income levels; and (3) the benefits and drawbacks of water system consolidation. Second, the Water Board should make greater use of its authority to pursue water system consolidations, along with an increase in the scope of that authority and more funding to support consolidation. Third, the state must find ways to supply greater funding for small water system operations and maintenance, infrastructural improvements, and disaster planning.

THE EMMETT INSTITUTE
ON CLIMATE CHANGE AND THE ENVIRONMENT
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Introduction

Achieving water safety and affordability can be particularly challenging for small and disadvantaged communities.

The State of California has declared that every human has a right to safe, affordable, accessible drinking water.[1] Most water systems are able to fulfill this right for most members of the communities they serve. Small water systems, though, raise a series of concerns over adequate provision of safe and affordable water.[2] These difficulties have long been recognized. The National Research Council, for example, addressed them in a landmark report more than twenty years ago.[3] In 2016, the State Water Resources Control Board ("Water Board") stated that achieving water safety and affordability goals "can be particularly challenging for small and disadvantaged communities that lack the resources to fund basic capital costs, let alone the ongoing costs of maintenance, energy, treatment and personnel needed to operate" water systems.[4] This is especially true for small water systems in Los Angeles (L.A.) County, which is more populous than 41 states.

This Pritzker Brief explores the challenges facing small water providers in L.A. County. First, the brief describes the structure of water systems (both large and small) in the county. Second, it explains the particular management and capital challenges that small systems face. Third, the brief focuses on the threats posed to the county's small water systems by groundwater contamination and lead leached from older pipes and fixtures. Finally, the brief identifies recent trends in state law and sets out policy proposals to ensure safe provision of drinking water by small systems in L.A. County.

1 The California Water Code states that "every human being has the right to safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitary purposes." Cal. Water Code § 106.3.

2 Small water systems, as described in the federal Safe Drinking Water Act, are water systems that serve more than 25 people and fewer than 10,000. 42 USC § 300g-1(b)(4)(E)(ii).

3 *See, e.g.* Nat'l Research Council, Safe Water From Every Tap: Improving Water Service to Small Communities (Washington, DC: The National Academies Press, 1997), *available at* https://doi.org/10.17226/5291.

4 Cal. Water Res. Control Bd., Frequently Asked Questions on Mandatory Consolidation or Extension of Service for Water Systems (Nov. 7, 2016), *available at* https://www.waterboards.ca.gov/drinking_water/programs/compliance/docs/fs082415_mand_consolid_faq.pdf.

Drinking Water Providers in L.A. County

There is enormous variation in the characteristics and capabilities of L.A. County water service providers. More than 200 systems range in size from the Los Angeles Department of Water and Power, which serves over 4 million people, to Winterhaven Mobile Estates in Antelope Valley, serving just 25 customers.[5] The table below details the size of systems and customers served. As a rough measure, over half of 213 county water systems supply drinking water to 10,000 or fewer people and cumulatively serve over 245,000 customers.[6]

Size distribution of L.A. County water systems[7]

	MINIMUM POPULATION SERVED	MAXIMUM POPULATION SERVICED	NUMBER OF SYSTEMS	TOTAL POPULATION SERVED
SMALL WATER SYSTEMS	25	500	66	9,473
	501	3,300	28	37,347
	3,301	10,000	32	207,594
LARGE WATER SYSTEMS	10,001	100,000	67	2,625,346
	100,001	>4,000,000	20	6,843,653

Large water systems serve most of urban L.A. County's population. Small systems are scattered throughout the county over a broad area, in both rural communities and urban neighborhoods in Los Angeles and other cities in the county. As the text box on page 4 explains, water systems operate under a range of management schemes. The diversity of water systems means they can serve different purposes with some amount of flexibility, but this diversity can also reduce the ability of state agencies to regulate or encourage action consistently across different types of water systems.[8]

The degree of dependence on imported water, local surface water, and local ground water varies from system to system. Overall, local groundwater provides as much as 38% of the county's total water supply.[9] Groundwater usage has been greatest during droughts, when groundwater recharge is reduced.[10] Importantly, the majority of L.A. County water systems that serve 3,300 or fewer people are *wholly* reliant on local groundwater.[11] By contrast, larger systems' supplies often consist of groundwater and surface water, providing redundancy when a particular supply is scarce.

5 Gregory Pierce & Henry McCann, Los Angeles County Community Water Systems: Atlas and Policy Guide 9 (UCLA Luskin Center for Innovation, Nov. 2015), *available at* http://innovation.luskin.ucla.edu/content/los-angeles-county-community-water-systems-atlas-and-policy-guide [hereinafter Water Atlas].

6 Ninety-four of 213 drinking water systems (44%) serve fewer than 3,300 customers. An additional 32 serve between 3,301 and 10,000. Thus 126 of 213 community water systems in the county, or about 59%, are small water systems under the EPA's definition. *Id.* at 9. Although the EPA and the Water Board count a total of 228 water systems in L.A. County, the systems in this table only count 213 of them because several listed systems included water wholesalers, had undefined boundaries, or were transitioning ownership at the time of the Water Atlas. *Id.* at 66 n.4.

7 *Id.*

8 *Id.* at 10.

9 Mark Gold, Stephanie Pincetl & Felicia Federico, 2015 Environmental Report Card for Los Angeles County 12 (UCLA Inst. of the Env't and Sustainability, 2015), *available at* https://www.ioes.ucla.edu/wp-content/uploads/report-card-2015-water.pdf.

10 *See* Mu Xiao et al., *How much groundwater did California's Central Valley lose during the 2012–2016 drought?*, 44 Geoph. Res. Lett. 4872 (2017); W.M. Alley, T.E. Reilly & O.L. Franke, Sustainability of Ground-Water Resources: U.S. Geological Survey Circular 1186 at p. 20-21 (U.S. Geol. Survey, 1999), *available at* https://pubs.usgs.gov/circ/circ1186/html/boxb.html.

Affordability of water and equity of pricing are also a concern in L.A. County. Although it is difficult to pin down the number of families for whom drinking water is unaffordable, water prices are almost certainly too high for many families in L.A. County.[12] Water bills for L.A. County residents often exceed $1,000 and can reach as high as $2,244 per family per year.[13] Pricing and customer income data are difficult to obtain for many individual small water systems, but due to the high prices that L.A. systems reach, and the possibility that systems with smaller customer bases will have to charge higher prices to compensate for higher costs per customer, affordability is almost certainly a significant concern for many of L.A. County's small water systems.[14] Because of the enormous disparities in income across L.A. County, and the enormous variance in pricing across water systems, equity merits special consideration when some systems are not meeting the expectations of the state's Right to Water goals.

Water System Types

- **MUNICIPAL UTILITIES.** Municipal utilities are authorized by municipal codes and managed under city regulations. These include many city utilities, including the largest water provider in the county, the L.A. Department of Water and Power.
- **PRIVATE WATER SYSTEMS.** Private systems range from large investor-owned utilities to smaller systems that provide water as an ancillary service, such as a mobile home park's residential water system. The California Public Utilities Commission ("CPUC") regulates private water systems. More than half of the 66 water systems serving fewer than 500 people in L.A. County are privately owned.[15]
- **MUTUAL WATER COMPANIES.** These are created by private agreements among landowners or other entities to share water delivery responsibilities and benefits. Some were formed for agricultural irrigation purposes, others to facilitate real estate development outside of formal cities in L.A County.[16] Mutual water companies can be investor-owned. Many mutual water companies are not regulated by the CPUC, but instead fall under the California Corporations Code. They typically face few regulatory requirements governing public access to information, community participation, and water rate adjustments.[17] Almost one-third of the water systems serving fewer than 500 people in L.A. County are mutual water companies.[18]
- **SPECIAL DISTRICTS.** Typically set up by governmental action, special districts include irrigation districts and county water districts, and they often operate on unincorporated land. They are managed directly by governmental entities or by independent governing boards. The California Water Code regulates special districts.

This categorization of water system types is primarily adopted from: LAUREL FIRESTONE, GUIDE TO COMMUNITY DRINKING WATER ADVOCACY **at 105-27, (**COMMUNITY WATER CENTER, 2009**), available at** https://www.communitywatercenter.org/cwc_community_guide.

11 CAL. WATER RES. CONTROL BD., COMMUNITIES THAT RELY ON A CONTAMINATED GROUNDWATER SOURCE FOR DRINKING WATER 34, table 1.3, (Report to the Legislature, Jan. 2013), *available at* https://www.waterboards.ca.gov/water_issues/programs/gama/ab2222/docs/ab2222.pdf [hereinafter COMMUNITIES THAT RELY ON CONTAMINATED GROUNDWATER].

12 *See* WATER ATLAS at 46.

13 *Id.* The EPA has previously stated that water costs should not exceed two percent of a community's mean household income ("MHI"). However that standard, and MHI-based thresholds in general, have come under widespread criticism for being arbitrary and not grounded in any empirical analysis. *See, e.g.* NAT'L ACAD. OF PUB. ADMIN., DEVELOPING A NEW FRAMEWORK FOR COMMUNITY AFFORDABILITY OF CLEAN WATER SERVICES 44-49 (2017). MHI-based estimates also miss many poorer people who may have affordability problems, such as those living in affluent communities; therefore examining actual household income may be a more useful approach. *See, e.g.* JULIET CHRISTIAN-SMITH, CAROLINA BALAZS, MATTHEW HEBERGER, & KARL LONGLEY, ASSESSING WATER AFFORDABILITY: A PILOT STUDY IN TWO REGIONS IN CALIFORNIA (Pac. Inst., 2013), *available at* https://www.waterboards.ca.gov/water_issues/programs/hr2w/docs/references/pacificinst_assessing_water_affordability.pdf.

14 "Community water systems for which we could not collect pricing data in Los Angeles County tended to be much smaller and serve populations with lower median incomes than those that did report pricing data. Affordability may be more of a concern among customers of these systems due both to the higher average cost of service provided by small water systems and the lower income levels among customers of these systems." WATER ATLAS at 47.

15 *Id.* at 10.

16 *About Mutuals*, CAL. ASS'N OF MUT. WATER COS., *available at* https://calmutuals.org/about-mutuals/ (last visited on Feb. 22, 2018); LAUREL FIRESTONE, GUIDE TO COMMUNITY DRINKING WATER ADVOCACY 122–127 (Comm. Water Ctr, 2009).

17 WATER ATLAS at 10.

18 *Id.*

Why Focus on Small Water Systems?

Small systems are scattered throughout the county over a broad area, in both rural communities and urban neighborhoods in Los Angeles and other cities in the county.

Small water systems face unique challenges. They frequently fail to benefit from the efficiencies that flow from economies of scale. As a result, small systems often have fewer sources of water available to them and fewer financial and personnel resources. Small water systems possess less developed infrastructure and can struggle to raise money to fund improvements or address problems.

Because of their greater customer base and access to capital, large water systems tend to have advantages over small systems. These often include: (1) more customers to divide the cost of improvements between; (2) more technical expertise; (3) better management skills and knowledge; (4) increased ability to solve operational problems internally; and (5) dedicated financial and business staff. Larger systems tend to have more highly-trained treatment and distribution system operators, who are more likely to be present and prepared to address incidents or emergencies.[19] Small systems often lack such staff.[20]

For these reasons, small water systems struggle with compliance. They have a higher percentage of water quality issues and higher rates of noncompliance with water quality standards than larger systems.[21] Eight percent of the state's small water systems violated one or more health-based drinking water standards at least once over the period from 2002 to 2010.[22] In particular, water systems serving between 15 and 200 service connections have the greatest noncompliance rates with state standards, especially in disadvantaged communities.[23] Less than half of systems serving fewer than 200 connections meet state drinking water standards and requirements.[24] These compliance struggles can harm public health. In a 2006 report, U.S. Environmental Protection Agency ("EPA") noted that direct data on the health impacts of small water systems was limited and underreported, but that some data "show health outbreaks related to small water systems."[25]

Many of the struggles of small water systems are due to the types of challenges listed below.

19 "They often lack technical expertise, the ability to address many of the issues pertinent to operating a water system, as well as qualified management and financial and business personnel. In many instances, especially for very small water systems, the system operator may be just a part-time position." Cal. Water Res. Control Bd., Safe Drinking Water Plan for California: In Compliance with Health & Safety Code Section 116365 at p. 60 (June 2015), *available at* https://www.waterboards.ca.gov/publications_forms/publications/legislative/docs/2015/sdwp.pdf [hereinafter Safe Drinking Water Plan].

20 *Id.*

21 *Id.* at 15. There is a distinction between general water quality issues and noncompliance with water quality standards, in that contaminants can be detected at levels below a legal threshold, but within a recognized range at which there still may be risks to health, flavor, or color. One example contaminant for which there could be a water quality issue, but a system could still be compliant with standards, is lead, which is recognized to pose health risks at any level. *See Basic Information about Lead in Drinking Water,* EPA.gov (Mar. 2018), https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water. Another is manganese, which, in small amounts, may not pose a health threat but will affect color and taste. Safe Drinking Water Plan at 45.

22 Kristina Donnelly, *Financing Drinking Water Infrastructure – Updates from the Golden State*, Pac. Inst. (July 16, 2013), https://pacinst.org/financing-drinking-water-infrastructure-updates-from-the-golden-state/. Systems are not penalized for violating public health goals, but the goals do provide useful benchmarks for judging water quality and for designing regulatory standards. *Public Health Goals (PHGs)*, Cal. Office of Envtl. Health Hazard Assessment (2018), https://oehha.ca.gov/water/public-health-goals-phgs.

23 Safe Drinking Water Plan at 190.

24 *Id.*

25 EPA Office of the Inspector Gen., Much Effort and Resources Needed to Help Small Drinking Water Systems Overcome Challenges 32 (May 30, 2006, Report No. 2006-P-00026), *available at* https://www.epa.gov/sites/production/files/2015-11/documents/20060530-2006-p-00026.pdf.

Monitoring and reporting

Water systems serving 3,300 to 10,000 customers have over seven times more monitoring and reporting violations, per 1,000 customers, than larger systems.[26] Systems serving fewer than 3,300 people violate monitoring and reporting requirements at still higher rates.[27] Smaller systems have higher monitoring costs per capita.[28] Over time, the increase in the number of regulated contaminants means monitoring costs will continue to increase for water systems, making compliance even more burdensome.

There is a great deal of uncertainty about the performance of the smallest systems—called "state small systems"—because they fall beneath the thresholds of the federal Safe Drinking Water Act ("SDWA") and state safe drinking water law. The SDWA does not apply to private wells, systems serving fewer than 25 people, or systems with fewer than 15 service connections.[29] State small systems are regulated at the county level and have less extensive reporting requirements, resulting in a paucity of data. Outside of initial testing during system permitting, private wells are not regulated at all by the state and although L.A. County recommends continued testing, it does not mandate it.[30]

Over time, the increase in the number of regulated contaminants means monitoring costs will continue to increase for water systems, making compliance even more burdensome.

26 EPA, National Characteristics of Drinking Water Systems Serving 10,000 or Fewer People 36 Exh. 2.48 and p. A-44 tbl. 38 (2011), *available at* http://dnrc.mt.gov/divisions/cardd/docs/resource-development/w2asact-docs/REVFINALNatCharacteJuly2011508compliant.pdf.

27 Systems serving from 501 to 3,300 customers have over 28 times as many monitoring and reporting violations per 1,000 customers as those with 10,000 or more customers. Systems serving fewer than 500 people commit monitoring and reporting violations over 350 times more—per 100 customers—than those with more than 10,000 customers. *Id.*

28 Shadi Eskaf, *Small Water Systems with Financial Difficulties are More Likely to Violate EPA Regulations*, The Environmental Finance Blog (Jan. 28, 2015), http://efc.web.unc.edu/2015/01/28/small-water-systems-financial-difficulties-likely-violate-epa-regulations/.

29 42 USC § 300f(4)(A); Cal. Health and Safety Code § 116275.

30 "The Department recommends that private wells be tested on a regular basis for nitrate, coliform bacteria, and primary inorganic chemicals (i.e. arsenic, lead, copper, etc.) to detect contamination problems early." Cnty. of Los Angeles Dep't of Pub. Health, Requirements and Procedures for Private and Commercial Water Wells Handbook 20-21, *available at* http://publichealth.lacounty.gov/eh/docs/ep_dw_Handbook.pdf (last visited on Sept. 18, 2018).

Treatment

In California, installing and operating water treatment is often difficult for small systems.[31] And, technological advances in treatment have not led to affordability for small and disadvantaged communities. Treatment facilities are technically challenging to maintain and operate, and the lack of affordable technologies for small systems impedes delivery of safe drinking water.[32] Per household, treatment costs are more than four times as high for systems serving 100 people or fewer than for systems serving greater than 10,000 people.[33]

One example of the difficulty in paying treatment costs can be found in Lanare, a small community in the San Joaquin Valley, where a treatment plant was constructed and paid for with $1.3 million in federal community development funds. In 2007, when the new plant went into operation, the cost of water for the community rose drastically and, within six months, the town was $100,000 in debt and the plant was shut down due to the higher-than-anticipated operating costs. The plant sat unused through 2017.[34] Eventually, the Water Board approved funding for the town to dig new wells,[35] partly because the town had never been able to obtain money for operating and maintaining the treatment plant.

Staffing

Small water systems lack resources and personnel for filling staffing needs. Volunteer utility boards often manage them; the members often lack formal training "and may lack skills in effective decision-making, dealing with conflict, working with groups, building consensus, and strategic planning."[36] High turnover can result in shifting priorities, lack of institutional memory, and less transfer of knowledge.

Small communities often cannot hire the professional staff they need.[37] If a small water system has a treatment facility, it will likely have a harder time acquiring and retaining water system operators with the necessary expertise.[38] Larger systems can pay higher salaries, and many small water systems are in smaller rural communities where the availability of certified operators—required by the EPA—is limited.[39] In L.A. County, many small systems are surrounded by larger systems that can pay higher wages.

31 Safe Drinking Water Plan at 127.

32 *Id.* at 180.

33 Deb Martin, Affordability and Capability Issues of Small Water and Wastewaters Systems: A Case for Regionalization of Small Systems at 2 (Rural Cmty. Assistance P'ship), https://rcap.org/wp-content/uploads/2012/01/Regionalization-Great-Lakes-RCAP-final.pdf. (*citing* EPA, Handbook for Capacity Development: Developing Water System Capacity Under the Safe Drinking Water Act as Amended in 1996 at 32, (2001)).

34 Ezra David Romero & Jerry Klein, *They Built It, But Couldn't Afford To Run It—Clean Drinking Water Fight Focuses On Gaps In Funding*, Valley Public Radio (June 6, 2017), *available at* http://www.kvpr.org/post/they-built-it-couldn-t-afford-run-it-clean-drinking-water-fight-focuses-gaps-funding; Patricia Leigh Brown, *The Problem Is Clear: The Water Is Filthy*, New York Times (Nov. 13, 2012), *available at* http://www.nytimes.com/2012/11/14/us/tainted-water-in-california-farmworker-communities.html?pagewanted=1&hp.

35 Ezra David Romero & Jerry Klein, *They Built It, But Couldn't Afford To Run It—Clean Drinking Water Fight Focuses On Gaps In Funding*, Valley Public Radio (June 6, 2017), *available at* http://www.kvpr.org/post/they-built-it-couldn-t-afford-run-it-clean-drinking-water-fight-focuses-gaps-funding.

36 Deb Martin, Affordability and Capability Issues of Small Water and Wastewaters Systems: A Case for Regionalization of Small Systems 2 (Rural Cmty. Assistance P'ship, 2012), https://rcap.org/wp-content/uploads/2012/01/Regionalization-Great-Lakes-RCAP-final.pdf.

37 *Id.*

38 Safe Drinking Water Plan at 58.

39 *Id.*

Reliability, redundancies, standby equipment

Small systems' water services can be less reliable and less sustainable than the services of larger systems. A smaller revenue base makes it harder to save for future infrastructural or emergency needs.

Small systems' water services can be less reliable and less sustainable than the services of larger systems. A smaller revenue base makes it harder to save for future infrastructural or emergency needs. Standby equipment and emergency redundancies are less common in small systems. Water distribution includes pipes, storage, pumps, and other equipment for which maintenance and operation is critical, especially during disasters.[40] Although some California water systems have worked on disaster preparedness, small water systems have done so less often.[41] Additionally, small water systems may not always be eligible for federal disaster funds. In one recent example from Sonoma County, a mutual water system serving fewer than 200 people was found ineligible for disaster relief from the Federal Emergency Management Agency because it was not included in local hazard mitigation plans and, as a private utility that did not serve the general public, did not classify as providing an essential government service.[42]

Rates

The systems least likely to be able to provide robust rate assistance are small systems and those serving predominantly disadvantaged communities.

Customers in small systems and systems serving disadvantaged communities often pay high rates[43] and have reduced access to rate assistance programs, which use rate payments from some customers to subsidize disadvantaged ones. Under state law, many systems are not obligated to provide rate assistance.[44] While large investor-owned utilities must do so, privately owned systems may choose to do so, or not.[45] The systems least likely to be able to provide robust rate assistance are small systems and those serving predominantly disadvantaged communities. In disadvantaged communities that lack economic diversity, rate assistance might not be an option because not enough ratepayers are able to subsidize others in need. And larger systems are much more likely to provide rate assistance to low-income customers than are small systems with small rate bases.[46]

40 "The maintenance and operation of the distribution system are critical to meet the demands for water, including during natural disasters such as earthquakes, floods, fires, power outages, etc." SAFE DRINKING WATER PLAN at 56.

41 *Id.*

42 *See* Cal. Office of Emergency Servs., Hazard Mitigation Grant Program (HMGP) DR-4382 Fact Sheet, *available at* http://www.caloes.ca.gov/RecoverySite/Documents/DR-4382%20HMGP%20Fact%20Sheet.pdf (last visited Aug. 24, 2018); Personal Communication, Max Gomberg, (Cal. Water Res. Control Bd., 2018).

43 The Luskin authors were unable to obtain pricing data for many smaller community systems that serve populations with lower median incomes. "Affordability may be more of a concern among customers of these systems due both to the higher average cost of service provided by small water systems and the lower income levels among customers of these systems." WATER ATLAS at 45.

44 THE PAC. INST., WATER RATES: WATER AFFORDABILITY at 2-3 (2013).

45 *See* CPUC, Order Instituting Rulemaking Evaluating the Commission's 2010 Water Action Plan Objective of Achieving Consistency between Class A Water Utilities' Low-Income Rate Assistance Programs, Providing Rate Assistance to All Low – Income Customers of Investor-Owned Water Utilities, and Affordability (June 29, 2017); *see also, e.g.* CPUC, *Class A Customer Assistance Programs* (2018), http://www.cpuc.ca.gov/General.aspx?id=2417.

46 WATER ATLAS at 24. By state law, publicly owned water systems cannot redistribute funds among their customers, meaning that charging some customers to subsidize others may not be possible. CAL. CONST. ART. XIII C AND D; CAL. CONST. ART. XIII A, § 3. However, privately owned systems may redistribute funds, and large investor-owned utilities must do so. *See* CPUC, Order Instituting Rulemaking Evaluating the Commission's 2010 Water Action Plan Objective of Achieving Consistency between Class A Water Utilities' Low-Income Rate Assistance Programs, Providing Rate Assistance to All Low – Income Customers of Investor-Owned Water Utilities, and Affordability (June 29, 2017); *see also, e.g.* CPUC, *Class A Customer Assistance Programs* (2018), http://www.cpuc.ca.gov/General.aspx?id=2417.

Financing

Many small water systems are not financially sustainable as currently operated.[47] They are often incapable of attracting investors. Their smaller size means that repair, upkeep, and regulatory compliance costs are proportionally higher than for a large system. Small systems typically have larger infrastructure funding needs; the cost per customer can be three times as high.[48] Raising customer rates or providing subpar service are often the only options available.[49] Operating expenses outpace revenue for about 30% of small water systems.[50]

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Obtaining funding from government sources can also be difficult for small systems. California has some state-managed loan and grant programs, but these are often challenging for small systems to access.[51] Other programs are specifically aimed at supporting small systems, but only those that state law defines as disadvantaged.[52] Of those small systems that qualify for loan pro-

47 Deb Martin, Affordability and Capability Issues of Small Water and Wastewaters Systems: A Case for Regionalization of Small Systems at 2, https://rcap.org/wp-content/uploads/2012/01/Regionalization-Great-Lakes-RCAP-final.pdf, (Rural Community Assistance Partnership (citing EPA, 2000 Community Water System Survey at 30 (2002)).

48 A 1999 nationwide EPA study projected that the small system (in this case, defined as fewer than 3,300 customers) need for infrastructure investments was more than $3,300 per household per year (through 2015, compared to $790 per household for large systems). EPA, Developing Water System Capacity Under the Safe Drinking Water Act as Amended in 1996, at p. 32 (EPA 816-R-99-012, July 1999), https://www.epa.gov/sites/production/files/2015-04/documents/epa816r99012.pdf.

49 *See* U.S. Water Alliance, An Equitable Water Future 13 (2017), *available at* http://uswateralliance.org/sites/uswateralliance.org/files/publications/uswa_waterequity_FINAL.pdf.

50 "Approximately 30 percent of small water systems have operating expenses greater than their revenues. Many are not financially sustainable as currently operated. This figure does not include debt service, nor does it take into account those systems that are barely making revenue meet expenses and thus have few reserve or emergency funds. Moreover, many systems delay needed maintenance because expenditures are based on current revenues rather than system needs." Deb Martin, Affordability and Capability Issues of Small Water and Wastewaters Systems: A Case for Regionalization of Small Systems 2 (Rural Cmty. Assistance P'ship, 2012), https://rcap.org/wp-content/uploads/2012/01/Regionalization-Great-Lakes-RCAP-final.pdf, (citing EPA, 2000 Community Water System Survey at 30 (2002)).

51 *See, e.g.* Cal. Water Comm'n, Small Water Systems Workshop 2 (Mar. 2014) https://cwc.ca.gov/-/media/CWC-Website/Files/Documents/2014/03_March/Small-Systems-Workshop-Meeting-Materials/SmallSystems_SummaryRecommendations_Final_7_14_14.pdf?la=en&hash=CFAC5B220551720380943F79A264E326104A6E7B; Ellen Hanak et al., Paying for Water in California 37 (Pub. Policy Inst. of Cal., 2014).

52 *See, e.g.* Cal. Water Res. Control Bd., Drinking Water State Revolving Fund Intended Use Plan (IUP) for SFY 2018-19 at 38-39 (June 19, 2018), *available at* https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/iup_2018/dwsrf_iup_sfy2018_19_final.pdf.

grams, many cannot afford loan repayments on top of operation and maintenance costs. Due to the risk of fraud or abuse, most current federal and state funding programs prohibit use of their funds for operations and maintenance costs—but this significantly limits their utility. To obtain state funding for proposed projects, water systems need to show they will be able to manage operations and maintenance going forward, but small systems struggle with this. The scarcity of personnel at small water systems also makes it difficult to pursue grants and loans.

Diversity of water sources

Small systems in L.A. County are particularly vulnerable to contamination because they are more likely than large systems to be dependent on limited groundwater basins. In the county, 73% of very small systems use only groundwater, while larger systems depend less on groundwater in favor of more diverse water supplies.[53] Even for those systems that are not wholly reliant on groundwater, drought can make them more reliant.[54] And those L.A. County small systems that draw from some amount of contaminated groundwater are more likely to be wholly reliant on that groundwater. As a case in point, all the groundwater-dependent small water providers that have violated maximum contaminant loads "(MCLs")— the legal standards set by the EPA under the SDWA—at the tap rely wholly on groundwater.[55] Further, because smaller systems have fewer wells, they have fewer alternatives when a well is contaminated. Due to their typically smaller geographic bounds, many smaller systems may be unable to site new wells in a location that could draw from uncontaminated water. Even water systems that are larger than the EPA definition of a small system can struggle with finding new sources. Santa Fe Springs, serving 18,199 customers, had to close two wells due to contamination and unsuccessfully attempted to drill a third.[56] It then tried to fix one of the contaminated wells, which resulted in water with bad odors and high temperatures.[57] All of these efforts cost the city water system money without creating any real benefit.[58]

Due to their typically smaller geographic bounds, many smaller systems may be unable to site new wells in a location that could draw from uncontaminated water.

Community engagement

Finally, small water system customers often have less access to data about their water provider and reduced ability to participate in water system decision-making. For example, roughly forty percent of water systems in the county do not provide a public facing website, and those water systems that do not are more likely to serve very small or small populations.[59]

53 More than half of systems serving between 500 and 3,300 customers are wholly reliant on groundwater. For systems serving between 3,300 and 10,000 customers, nearly a quarter are wholly reliant on groundwater. Ten percent of large systems in the county rely only on groundwater. County-wide, 79 systems are wholly reliant on groundwater; 70 of them serve fewer than 10,000 customers. WATER ATLAS at 13.

54 *Id.* at 17.

55 The larger systems that have had MCL violations rely on a mix of groundwater and purchased water. COMMUNITIES THAT RELY ON CONTAMINATED GROUNDWATER at 138-141. Of the six L.A. County water systems that exceeded Lead and Copper Rule action levels between 2012 and 2015, four were small water systems, all serving fewer than 3,300 customers. Robert Hopwood and Barrett Newkirk, *Database: Lead in California drinking water*, THE DESERT SUN (Mar. 16, 2016) (citing data from EPA *via* USA Today), http://www.desertsun.com/story/news/data/2016/03/16/database-lead-california-drinking-water/81873012/.

56 Mike Sprague, *Santa Fe Springs looks for alternate sources of water after contamination forces closure of its only two wells,* (Oct. 19, 2017), https://www.whittierdailynews.com/2017/10/19/santa-fe-springs-looks-for-alternate-sources-of-water-after-contamination-forces-closure-of-its-only-two-wells/.

57 *Id.*

58 *Id.*

59 WATER ATLAS at 36.

The Story of Maywood and its Small Water Systems

The city of Maywood illustrates many of the problems that smaller systems face. With 26,000 residents, Maywood is an industrial city in southeastern L.A. County with two battery recycling plants and with federal Superfund sites. It is served by three small water systems, Maywood Mutual Water Companies Number 1, 2, and 3, each of which provides water to fewer than 10,000 customers. The water companies draw from both groundwater and purchased surface water.

For years, two of Maywood's water companies produced brown- or tea-colored water. At the time that water quality complaints became a public issue, each company was accountable only to its shareholders, the property owners in town.[60] In the 1990s, after trying to get the mutual water companies to test the water, community groups convinced the state Department of Toxic Substances Control to test their water. The testing found high concentrations of manganese, along with elevated concentrations of trichloroethylene ("TCE").[61] The TCE was generally below the regulatory limit. Manganese's primary effect is on taste and visibility. However, at least one study has noted the potential adverse effects of manganese exposure at high levels.[62]

The time since the discovery of these problems has been marked by remediation efforts and continued testing. In 2013, Governor Jerry Brown signed AB 240, forcing the Maywood water companies to comply with open meeting, public record, and budgetary requirements, making decision processes more transparent. However, the Governor also cut money intended for the system, reducing an appropriation of $7.5 million for cleaning Maywood's water to $1 million.[63]

Recent testing of both drinking water and untreated groundwater by researchers at UCLA found high levels of contamination in the untreated groundwater, with manganese in untreated groundwater at 1,000 times the EPA Secondary Contaminant Limit,[64] trichloroethylene at 2,500 times its MCL,[65] and lead at 5 times the action level that the EPA sets in its Lead and Copper Rule.[66] Although the drinking water in Maywood recently tested as within legal limits for all pollutants, the water still has aesthetic defects that result in many residents forgoing it as drinking water and buying bottled water instead.[67] This suggests that the treatment system has been effective in meeting current health standards, but if residents are still buying their drinking water instead of using the water from the tap, that level of effectiveness is very limited, with serious consequences for affordability.

One strategy that towns like Maywood could use, moving forward, is water system consolidation.[68] A single, larger provider could marshal more resources for treatment and would have more purchasing power, increased negotiation leverage, and the ability to set a water price that is consistent across the town.

60 Additionally, mutual water companies are generally not regulated by the CPUC. *See supra* p.4.

61 *See* UCLA Inst. of the Env't and Sustainability, Assessing Groundwater Contamination in Maywood, California (2016), https://www.ioes.ucla.edu/wp-content/uploads/Practicum_2015-16_Environment_Now_Maywood_Groundwater_Final_Report.pdf; *see also* Hector Becerra, *Maywood gets straight talk about its water quality*, Los Angeles Times (June 29, 2013), *available at* http://articles.latimes.com/2013/jun/29/local/la-me-maywood-water0629-20130630.

62 *See, e.g.* M.F. Bouchard et al., *Intellectual impairment in school-age children exposed to manganese from drinking water*, 119(1) Envtl. Health Perspec. 138 (Jan. 2011), *available at* https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3018493/. Manganese is currently a secondary contaminant, meaning it is recognized as affecting taste, sight, or smell, but EPA does not enforce MCLs for manganese. *See Secondary Drinking Water Standards: Guidance for Nuisance Chemicals*, EPA.gov, https://www.epa.gov/dwstandardsregulations/secondary-drinking-water-standards-guidance-nuisance-chemicals (last updated on March 8, 2017).

63 Paul, Glickman, *Gov. Brown signs bill enforcing transparency on Maywood water companies*, Southern California Public Radio (Oct. 8, 2013), http://www.scpr.org/blogs/politics/2013/10/08/14924/gov-brown-signs-bill-enforcing-transparency-on-may/.

64 UCLA Inst. of the Env't and Sustainability, Assessing Groundwater Contamination in Maywood, California 35 (2016), https://www.ioes.ucla.edu/wp-content/uploads/Practicum_2015-16_Environment_Now_Maywood_Groundwater_Final_Report.pdf.

65 *Id.* at 12.

66 *Id.*; *see also* Control of Lead and Copper, 40 C.F.R. § 141.80(c) (2018).

67 *Id.* at 111.

68 *See infra* pp. 18-19.

Water Quality Threats to L.A. County's Small Water Systems

L.A. County drinking water systems face contamination threats from a range of sources, including industrial waste and byproducts, lead from older pipes and fixtures, agricultural pollutants, and naturally occurring contaminants. Each water system faces different threats depending on its geography, development, and proximity to specific industries. In this section, we focus on water quality concerns related to groundwater contamination, as well as lead contamination within the drinking water delivery system. We address groundwater because arid Southern California has a high level of reliance on groundwater and will continue to do so. And we look at lead contamination because it has been a topic of national focus and local concern.

Groundwater contamination

Plumes of solvents or other toxics derived directly or indirectly from industrial activities can contaminate water supplies for decades. Similarly, agricultural products including nitrates and pesticides can lead to contamination.

Despite natural variation in its quality, groundwater has long been a valuable source of drinking water.[69] In southern California, where surface water is scarce for most of the year, groundwater can provide a reliable source in an otherwise arid region. Depending on basin geology and water chemistry, the host rock can contribute natural contaminants to groundwater such as arsenic or uranium.[70] Therefore, not all contaminated groundwater is due to human intervention.

Human pollution poses additional challenges to the management of drinking water aquifers. Plumes of solvents or other toxics derived directly or indirectly from industrial activities can contaminate water supplies for decades.[71] Similarly, agricultural products including nitrates and pesticides can lead to contamination.[72] One large plume, the San Gabriel Valley contamination plume, includes four separate Superfund sites[73] comprising 45 residential water suppliers,[74] many of which are smaller water systems.[75] Cleanup efforts have been ongoing for decades, will cost between $200 and $250 million over the next ten years, and will continue for another 50 to 60.[76]

Groundwater contamination is an especially important issue in L.A. County, where more water systems, and more people, rely on contaminated groundwater than in any other California county.[77] Thirty-nine percent of the county's water systems rely in whole or in part on groundwater that is contaminated. More than 900,000 people—11% of the county's population—are wholly reliant on contaminated groundwater.[78]

69 *USGS Water Quality Information, FAQ: How is water naturally filtered or purified?*, USGS (Dec. 28, 2016), https://water.usgs.gov/owq/FAQ.htm#Q23.

70 *Contaminants Found in Groundwater*, U.S. Geological Survey, https://water.usgs.gov/edu/groundwater-contaminants.html (Dec. 2, 2016); A. H. Welch, D. B. Westjohn, D.R. Helsel, & R. B. Wanty, *Arsenic in ground water of the United States-- occurrence and geochemistry* 38(4) Ground Water 589-604 (2000).

71 Alex N. Helperin, David S. Beckman & Dvora Inwood, California's Contaminated Groundwater: Is the State Minding the Store? at p. vi-viii (Natural Resources Defense Council, 2001), *available at* https://www.waterboards.ca.gov/gama/docs/nrdcgw_4_01.pdf.

72 *See* Karen R. Burow, Sylvia V. Stork & Neil M. Dubrovsky, Nitrate and pesticides in ground water in the eastern San Joaquin Valley, California: Occurrence and trends (USGS Water-Resources Investigations Report 98-4040-A, 1998).

73 *Superfund Sites in Southern California*, EPA (2016), https://archive.epa.gov/region9/socal/web/html/index-7.html.

74 Press Release, Reference News Release: EPA orders $20 million Northrop cleanup at San Gabriel Valley Superfund site, EPA (Sept. 4, 2011), *available at* https://www.epa.gov/enforcement/reference-news-release-epa-orders-20-million-northrop-cleanup-san-gabriel-valley.

75 *See* Safe Drinking Water Search for the State of California, EPA Safe Drinking Water Information System, https://iaspub.epa.gov/enviro/sdw_form_v3.create_page?state_abbr=CA (last visited July 22, 2018).

76 Steve Scauzillo, *Contaminated ground water in San Gabriel Valley gets $250 million boost, extending cleanup until 2027*, San Gabriel Valley Tribune (June 4, 2017), *available at* https://www.sgvtribune.com/2017/06/04/contaminated-ground-water-in-san-gabriel-valley-gets-250-million-boost-extending-cleanup-until-2027/.

77 Communities that Rely on Contaminated Groundwater at 12, fig. 1.

78 *Id.* at 32, 34.

Contaminated groundwater creates affordability and accessibility issues because water systems must pay the high cost of installing treatment infrastructure or importing cleaner water, and sometimes both. When groundwater is contaminated and not treated, some water systems continue to provide contaminated water and their customers end up buying bottled water, paying twice.[79] County-wide, groundwater treatment and other operational costs to supply clean water run in the billions of dollars.[80] Those costs are then passed on to customers through higher water rates and assessments, with smaller systems charging higher costs per household.

The State has made strides toward cooperatively managing groundwater, which could ensure that areas like L.A. County have adequate supplies of quality groundwater for longer. The Sustainable Groundwater Management Act (SGMA) of 2014 provides for local and regional Groundwater Sustainability Agencies to prepare sustainability plans for long-term groundwater management.[81] Although the SGMA focuses largely on recharge and supply of groundwater, it also provides for monitoring and maintenance of water quality, and it could aid water systems in working cooperatively to maintain supplies and avoid the high costs of importation.[82] Whether the law will be effective in this manner, though, remains to be seen.

Purchasing imported water is an alternative source to groundwater, but is expensive, and its price is likely to increase. One estimate for imported water puts the cost at $1,476 to $1,790 per acre foot, which is almost double the average cost of local groundwater ($739) even after treatment.[83] Metropolitan Water District's (MWD) rates for imported water increased 96% between

79 Stephen Stock, Michael Bott, Jeremy Carroll, and Felipe Escamilla, *'A Tragedy': Hundreds of Thousands of California Residents Exposed to Contaminated Water*, NBC Mar. 2, 2017), https://www.nbcbayarea.com/investigations/A-Tragedy-Hundreds-of-Thousands-of-California-Residents-Exposed-to-Contaminated-Water-415136393.html.

80 Mark Gold Stephanie Pincetl & Felicia Federico, 2015 Environmental Report Card for L.A. County: Water at 17 (2015), *available at* https://www.ioes.ucla.edu/wp-content/uploads/report-card-2015-water.pdf.

81 Governor's Office of Planning and Research, Sustainable Groundwater Management Act and Related Legislation (2014), http://opr.ca.gov/docs/2014_Sustainable_Groundwater_Management_Legislation_092914.pdf.

82 See Cal. Code of Regulations, Title 23, Chapter 1.5, Subchapter 2, Groundwater Sustainability Plans, https://water.ca.gov/LegacyFiles/groundwater/sgm/pdfs/GSP_Emergency_Regulations.pdf.

83 Erik Porse at al., *The economic value of local water supplies in Los Angeles*, 1 Nature Sustainability 289, 292 tbl. 2 (2018).

2006 and 2012,[84] and MWD estimates rates will increase at 4.5% a year through 2026.[85] During California's last drought, L.A. Mayor Eric Garcetti cited the cost of water as one reason for an executive order to reduce Los Angeles's dependence on imported water 50% by 2024.[86] The Department of Water and Power's director of water quality has stated that the cost of imported water from the State Water Project and from the Colorado River "is just going to go up."[87]

Because small systems are more reliant on contaminated groundwater, they incur higher treatment costs. The smallest systems are more likely to be significantly or wholly reliant on groundwater,[88] and several of L.A. County's small systems rely on contaminated groundwater that requires extensive treatment, imposing higher water costs than systems with non-contaminated groundwater. For example, in the community of Hollydale, one of the Golden State Water Company's two wells draws from contaminated groundwater.[89] Three of four wells in Glendale's South Montebello Irrigation District, a medium-sized supplier, draw from contaminated water.[90] Much of the impact of groundwater contamination, whether through increased cost of treatment or quality problems, lands on small water systems.

Lead leaching from older water pipes and fixtures

Lead in piped drinking water is an issue nationwide and has been a topic of general concern in L.A. County, and L.A. County's small water systems may face particular challenges with respect to lead in drinking water. Data gaps leave open the possibility that vulnerable populations in the region face greater risk of exposure, as has been evident in communities such as Flint, Michigan.[91] Without more data on which groups are at risk, and about the level of risk, it is difficult to ascertain the extent of the possible problem. The lead action level—at which a water supplier must begin to work with consumers to lower exposure—is 15ppb.[92] Even at these low levels, lead can be harmful to children, especially for cognitive development.[93]

Lead testing occurs within individual water systems and is the only mandatory testing at the tap for community water systems. Small water systems test roughly the same proportion of taps as large ones each year, because the number of taps tested depends on population.[94] But waiver provisions enable some small water systems to test less frequently, which can result in emerging problems going unnoticed for longer. After submitting a certain number of uncontaminated samples, smaller systems may go up to nine years without lead testing.[95] While this

84 Register Staff Writer & Teri Sforza, *Imported water prices: Up 96 percent since 2006*, The Orange County Register (Apr. 15, 2012), *available at* https://www.ocregister.com/2012/04/15/imported-water-prices-up-96-percent-since-2006-2/.

85 Metropolitan Water District Ten-Year Financial Forecast 1 (Feb. 9, 2016), http://www.mwdh2o.com/PDF_Who_We_Are_Proposed_Water_Rates_n_Charges/02092016%20FI%209-2%20A-2.pdf.

86 Mayor Eric Garcetti, Executive Directive No. 5 (Oct. 14, 2014), *available at* https://www.lamayor.org/sites/g/files/wph446/f/page/file/ED_5_-_Emergency_Drought_Response_-_Creating_a_Water_Wise_City.pdf?1426620015.

87 Rong-Gong Lin II & Priya Krishnakumar, *Groundwater contamination a growing problem in L.A. County wells*, Los Angeles Times (May 23, 2015, 6:45 A.M.) *available at* http://www.latimes.com/visuals/graphics/la-me-g-drought-wells-20150520-htmlstory.html.

88 Sixty-three of 84 systems serving fewer than 3,300 customers are wholly dependent on groundwater. Water Atlas at 17.

89 Communities that Rely on Contaminated Groundwater at 138-51.

90 *Id.*

91 Justin Talbot-Zorn & Michael Shank, *What the Flint Crisis Reveals About Inequality in the U.S.*, Time (Feb. 9, 2016), *available* at http://time.com/4212941/flint-and-inequality/.

92 Control of Lead and Copper, 40 C.F.R. § 141.80(c) (2018); Cal. Code Regs. § 64678.

93 R.L. Canfield et al., *Environmental lead exposure and children's cognitive function*, 31(6) The Italian Journal of Pediatrics 293 (2005).

94 Generally, larger providers must test from 100 sites. Systems that serve under 3,300 customers must test 20 taps per year, and those that serve under 500 customers must test 10 taps per year. Systems serving under 100 customers must test five taps per year. Although both large and small water systems are at risk of lead contamination, this stepwise progression means that many smaller systems test a higher proportion of their taps. The smallest systems test at least 5 percent of taps, and the larger systems test under 1 percent of taps. Cal. Code Regs. tit. 22, § 64675, *available at* https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/lawbook/dwregulations-2017-09-14.pdf.

95 Cal. Code Regs. tit. 22, §§ 64675, 64675.5, 64678.5.

policy reduces burdens on some small systems, it may also permit contamination problems to remain undiscovered over time.[96]

Between 2012 and 2015, six L.A. County water systems exceeded state standards for lead and copper.[97] Four of those six were small water systems. And in L.A. County in 2012, blood tests found over 5% of children tested in four zip codes to have elevated blood lead levels, at above 4.5 micrograms per deciliter.[98] Many more zip codes showed between 3% and 5% of children had high lead exposure rates.[99] A 2017 Reuters analysis of blood tests in children found 323 L.A. neighborhoods to have a rate of elevated lead levels at least as high as the rate in Flint, Michigan. That analysis, however, was based on an L.A. County assessment that mischaracterized the data and overstated the number of elevated tests, highlighting a need for better information on lead contamination and on blood testing.[100] EPA estimates that for infants and small children, drinking water may cause 40 to 60% of exposure to lead.[101] It is not known how much of the elevated lead levels in L.A. County can be attributed to drinking water, and other sources, such as contaminated soils, lead paints, or consumer products can contribute. But, given the risks that lead poses, especially to children, the issue of lead in drinking water demands further study.

Given the risks that lead poses, especially to children, the issue of lead in drinking water demands further study.

96 Elizabeth Jones, *Drinking Water in California Schools: An Assessment of the Problems, Obstacles, and Possible Solutions*, 35 Stanford Environmental Law Review 251, 267, *available at* https://law.stanford.edu/wp-content/uploads/2017/01/jones.pdf.

97 Robert Hopwood & Barrett Newkirk, *Database: Lead in California drinking water*, The Desert Sun (Mar. 16, 2016) (citing data from EPA via USA Today), http://www.desertsun.com/story/news/data/2016/03/16/database-lead-california-drinking-water/81873012/.

98 "California is more protective than current national guidelines and regards blood lead values at and above 4.5 mcg/dL as equivalent to the Centers for Disease Control and Prevention reference value of 5 mcg/dL." Cal. Dep't of Pub. Health, California Zip Codes with Blood Lead Levels (BLLs) at and above 4.5 micrograms per deciliter, for children less than age 6, with at least 250 children tested pp. 2-6 (2012), *available* at https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/CLPPB/CDPH%20Document%20Library/zip_code_2012_250_tested.pdf.

99 *Id.*

100 Joshua Schneyer, *L.A. health officials misstated some cases of childhood exposure*, Reuters (June 1, 2017), https://www.reuters.com/article/us-usa-lead-la-idUSKBN18S66J.

101 *Basic Information about Lead in Drinking Water*, Epa.gov, https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water (last updated Aug. 21, 2017). Other sources of lead include paints, contaminated soils, and many consumer products. N.Y. State Dep. of Pub. Health, *Sources of Lead*, https://www.health.ny.gov/environmental/lead/sources.htm. (2010).

The incidence and degree of contamination could be higher than test results indicate. For example, EPA researchers have found that current sampling protocols will often "considerably underestimate the peak lead levels and overall mobilized mass of waterborne lead in a system with lead service lines."[102] EPA has also warned that there are cases in which typical lead sampling procedures "may not adequately protect" the public from lead exposure.[103]

Lead in schools

Most of the public attention in L.A. County regarding lead in drinking water has focused on schools.[104] Schools in small systems, or that constitute their own water systems, may face hurdles in addressing such contamination due to lack of resources. The Water Board announced in January 2017 that it would test and provide technical support to schools if they requested it.[105] Within L.A. County, as of January 31, 2018, only 165 of 2,222 schools had tested for lead.[106] Water quality expert Marc Edwards noted that schools often "feel it's almost better not to sample, because you're better off not knowing."[107] For cash-strapped school districts, there is the risk of incurring the cost of further monitoring, plus the responsibility for reducing contamination that is found.[108]

Beginning in 2018, AB 746 made lead testing mandatory in any California school built before 2010, and the legislature is considering a similar statute that applies to all licensed daycare centers.[109] Although lead in schools is not a problem unique to small water systems, as with many issues, smaller systems are less likely to have the resources to pay for remediation or to undergo active monitoring. AB 746 helps by providing for reimbursement of costs to local communities.

102 Miguel A. Del Toral, Andrea Porter & Michael R. Schock, *Detection and Evaluation of Elevated Lead Release from Service Lines: A Field Study*, 47 Envtl Sci. Tech. 9303 (2013).

103 EPA Office of Water, Lead and Copper Rule White Paper at 3 (Oct. 2016), *available at* https://www.epa.gov/sites/production/files/2016-10/documents/508_lcr_revisions_white_paper_final_10.26.16.pdf.

104 *See, e.g.* Barret Newkirk, *Don't drink the water: Lead found in California schools*, The Desert Sun (Mar. 16, 2016.), *available at* http://www.desertsun.com/story/news/health/2016/03/16/california-lead-water-schools/81343492/.

105 *Lead Sampling of Drinking Water in California Schools*, Cal. Water Res. Control Bd. 2018), https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml; Press Release, Cal. Water Res. Control Bd, Water Boards, California Water Systems to Provide Lead Testing For Schools (Jan. 17, 2017), *available at* https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/leadsamplinginschools/pr011717_lead_test_schools.pdf.

106 *Number of School Requests as of January 31, 2018*, Cal. Water Res. Control Board (2018), https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/leadsamplinginschools/map_school_lead_requests.pdf; *Los Angeles County Schools*, Public School Review, https://www.publicschoolreview.com/california/los-angeles-county (last visited Jan. 13, 2018).

107 Michael Wines, Patrick McGeehan & John Schwartz, *Schools Nationwide Still Grapple With Lead in Water*, The New York Times (Mar. 26, 2016), *available at* https://www.nytimes.com/2016/03/27/us/schools-nationwide-still-grapple-with-lead-in-water.html?_r=0.

108 Elizabeth Jones, *Drinking Water in California Schools: An Assessment of the Problems, Obstacles, and Possible Solutions*, 35 Stanford Environmental Law Journal 251 (2016).

109 AB 2370 (2018), *available at* https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB2370.

Recent State Action on Drinking Water

California has taken several steps to aid water systems, some of which help small systems. Recently enacted statutes have articulated Californians' right to clean drinking water; developed resources for struggling water systems; and enhanced the power of the Water Board to consolidate struggling systems with better-resourced systems. None of these actions, however, has been sufficient to overcome the challenges faced by small water systems in L.A. County.

Recognition of a human right to water

In 2012, the State passed a statute affirming that citizens have the right to safe, affordable drinking water. Though important for articulating California's values and goals, the law does not create enforceable rights.[110] It does not require the state to provide safe water. Instead, it requires "[a]ll relevant state agencies" to "consider this state policy when revising, adopting, or establishing policies, regulations, and grant criteria when those policies, regulations, and criteria are pertinent to the uses of water described in this section."[111] The bill does not provide funding to achieve the promised right to water, nor guidance to agencies charged with implementing the statute.[112] Although it does commit to an important goal, the state cannot make significant progress toward that goal without additional policy and resources.

Funding for water systems

More funding is necessary to address water reliability and contamination.[113] Small water suppliers generally have fewer resources than larger systems and are therefore especially reliant on outside sources of funding for treatment systems, new infrastructure, and other improvements that enhance water quality, reliability, and affordability.

Some money for these purposes is available from the federal government. Under the SDWA, EPA may award grants to state revolving funds, which pay to improve water access and quality. The revolving funds provide low- or no-interest loans to communities for infrastructure projects. But this source of funding is limited; only twenty-two small water systems in California received funding in the 2016-2017 fiscal year, none in L.A. County.[114]

California has stepped in to grow the pot of money available for water programs. Proposition 1 created a $7.1 billion bond for water improvements. It makes $520 million available for projects to help provide "clean, safe, and reliable drinking water to all Californians." Currently, Proposition 1 funds two drinking-water projects in L.A. County, both in water systems that serve fewer than 10,000 customers. The first, for Maywood Mutual Water Company No. 2, includes wellhead treatment to provide cleaner water to more than 7,000 customers. A similar project will help the 7,500 customers of the Tract 349 Mutual Water Company of Cudahy.[115]

110 Senate Committee on Natural Resources and Water, AB 685 Bill Analysis 3 (July 7, 2011).

111 Cal. Water Code § 106.3(b); *see also* Cal. Water Code § 106.3(c)–(e) (further detailing the boundaries of this requirement).

112 Berkeley Law International Human Rights Law Clinic, Summary Report: Convening on the Implementation of the Human Right to Water (AB 685) at 2 (Nov. 2013).

113 *See, e.g.* Communities that Rely on Contaminated Groundwater.

114 Cal. Water Res. Control Bd., The Drinking Water State Revolving Fund Annual Report, State Fiscal Year 2016-2017, at 42 (2017), https://www.waterboards.ca.gov/drinking_water/services/funding/documents/srf/dwsrf_annual_report_1617.pdf.

115 Cal. Water Res. Control Bd., *CA Drinking Water Watch, Water System Details: Tract 349 Mutual Water Co.* https://sdwis.waterboards.ca.gov/PDWW/JSP/WaterSystemDetail.jsp?tinwsys_is_number=2599&tinwsys_st_code=CA&wsnumber=CA1910160 (last visited June 14, 2018).

Still, much more funding is needed. Peter Gleick, President Emeritus of the Pacific Institute, cautioned that Proposition 1 was "an expensive down-payment on a broad set of important projects that have been underfunded for years,"[116] but that more was necessary, including funding for operations and maintenance and for consolidation of ineffective systems.[117] According to the Water Board, California's drinking water needs are more than $2.2 billion per year for the next 20 years, far more funding than is available from current programs.[118]

Merged systems provide access to a larger resource base and create efficiency gains. Costs of infrastructure improvements, operations, and maintenance can be spread among more ratepayers. A combined system can also enhance reliability and affordability by accessing larger, cleaner sources of water within system bounds.

The state government has made organizational changes to aid small systems with both funding and technical support. For example, in 2015, Assembly Bill 92 created an entire unit within the Water Board's Division of Financial Assistance—the Office of Sustainable Water Solutions—dedicated to providing financial and technical assistance to small and disadvantaged systems, and to promoting water system consolidation for unserved or underserved communities.[119] The Office of Sustainable Water Solutions works within the constraints of the Proposition 1 funding system, but provides an access point through which anyone from a small or disadvantaged water system can apply for assistance.[120] While financially strapped water systems theoretically have access to large amounts of funding for certain activities, the limitations discussed above on accessing money for operations and maintenance make the existence of those funding streams insufficient.

Water system consolidation

Recently, water system consolidation has emerged as an increasingly important strategy for improving conditions in smaller systems. Under state law, consolidation means "joining two or more public water systems, state small water systems, or affected residences not served by a public water system, into a single public water system."[121] EPA has identified the benefits of consolidation as: (1) improved economies of scale; (2) increased financial opportunities for water systems; (3) reduced duplication of services; (4) increased reliability; (5) increased system flexibility; and (6) enhanced protection of public health, skill improvements, and service efficiency.[122] Merged systems provide access to a larger resource base and create efficiency gains. Costs of infrastructure improvements, operations, and maintenance can be spread among more ratepayers. A combined system can also enhance reliability and affordability by accessing larger, cleaner sources of water within system bounds.

116 Peter H. Gleick, *The California Water Bond is a Beginning, Not an End: Here's What's Next*, Huffington Post (Nov. 15, 2014), http://www.huffingtonpost.com/peter-h-gleick/the-california-water-bond_b_6104908.html.

117 *Id.*

118 Cal. Water Res. Control Bd., State of California Drinking Water State Revolving Fund Intended Use Plan: State Fiscal Year 2016-2017 p. 2 (2016), *available at* https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2016/final_dwsrf_iup_report_062116_with_cover.pdf; *see also* EPA, Drinking Water Infrastructure Needs Survey and Assessment: Sixth Report to Congress 36 (EPA Office of Water, EPA 816-K-17-002, Mar. 2018), *available at* https://www.epa.gov/sites/production/files/2018-10/documents/corrected_sixth_drinking_water_infrastructure_needs_survey_and_assessment.pdf.

119 Cal. Water Code § 189(a); *Office of Sustainable Water Solutions*, Cal. Water Res. Control Bd. (Apr. 30, 2018), https://www.waterboards.ca.gov/water_issues/programs/grants_loans/sustainable_water_solutions/.

120 Cal. Water Res. Control Bd., *Proposition 1 Technical Assistance Fact Sheet* (Mar. 2018), *available at* https://www.waterboards.ca.gov/water_issues/programs/grants_loans/proposition1/docs/prop1_ta_fact_sheet.pdf.

121 Cal. Health and Safety Code § 11681(e). Others favor a broader definition of consolidation that includes physical consolidation along with non-physical ones. "Physical consolidations involve the merging or sharing of physical infrastructure, such as distribution pipelines or water treatment facilities. Non-physical consolidations (sometimes described as "managerial" or "operational") involve sharing financial, managerial or technical capacity, such as through shared billing, equipment sharing, and shared staff or consultants. In practice, consolidations can combine elements of both." Nell Green Nylen et al., Learning from California's Experience with Small Water System Consolidations: A Workshop Synthesis at 2, (Berkeley Law, May 2018), https://www.law.berkeley.edu/wp-content/uploads/2018/05/SmallWaterSystemConsolidation_2018-05-02.pdf.

122 EPA Office of the Inspector Gen., Much Effort and Resources Needed to Help Small Drinking Water Systems Overcome Challenges 26 (May 30, 2006, Report No. 2006-P-00026), https://www.epa.gov/sites/production/files/2015-11/documents/20060530-2006-p-00026.pdf.

Towns like Maywood, for example, could benefit from water system consolidation. For its purchased water, one company negotiating with MWD would have more leverage, as a larger consumer, than would each water company working on its own behalf. And a larger customer base could increase available resources for treating water or for responding to infrastructure issues that arise. Additionally, it would lead to more consistent, equitable pricing for town residents. Currently the town's residents pay three different water prices for water, depending on which company services them.[123]

Consolidation does have risks. First, smaller systems subsumed within larger ones face the prospect of losing local control. Though significant, this risk can be overstated, especially for small systems that already fail to provide meaningful local control to most residents. Second, consolidation can lead to greater financial risk for the healthier of two consolidating systems, which may not welcome shouldering the financial and maintenance burdens of a weaker system. Finally, consolidations may lead to loss of jobs because of greater efficiencies. Because of these concerns, mandatory consolidation of smaller systems has been controversial.

In 2015, the California legislature granted the Water Board authority to mandate consolidation of water systems in some circumstances. SB 88 permits the Water Board to order consolidation—or an extension of service to an unserved area—when a system consistently fails to provide an adequate water supply. The Water Board has stated that consolidation could benefit many systems in the state, especially smaller systems and those serving disadvantaged communities.[124] But it has been slow to use its new consolidation powers. Most consolidations in California remain voluntary, supported by the carrot of funding from the Drinking Water State Revolving Fund or from water bonds. The Water Board typically will invite a failing system and a receiving system to merge, notifying them that they have six months to develop a consolidation plan. If they do not do so within that period, the Water Board may then order consolidation. There are several procedural hurdles which exist to safeguard water systems from abuses of Water Board authority. In addition to working through the voluntary consolidation process first, the Water Board must conduct a feasibility study, must work with county authorities, evaluate alternative enforcement remedies, and hold public hearings. These all take funding and time.

The Water Board has used its power to mandate consolidation or extension of services in only one case and has sent a letter urging voluntary consolidation and expressing an intent to mandate in 12 others.[125] Estimates for the total number of consolidations—mandatory and voluntary— in progress throughout the state range between 32 and 50.[126]

In L.A. County, consolidations remain exceedingly rare. In fact, in over forty years, only one consolidation has occurred in the county.[127] In April of 2018, the Water Board issued its first consolidation intent letter to a L.A. County small water system, the Desert Breeze Mobil Home Estate in Encino, which serves 82 people and has consistently had high levels of uranium.[128]

123 *See* Karen Foshay & Alice Walton, *Does tiny Maywood need three private water companies?* Southern Cal. Pub. Radio (Oct. 4, 2013), *available at* http://www.scpr.org/blogs/politics/2013/10/04/14894/does-tiny-maywood-need-three-private-water-compani/ (last visited June 7, 2018).

124 Cal. Water Res. Control Bd., Frequently Asked Questions on Mandatory Consolidation or Extension of Service for Water Systems (Nov. 7, 2016), https://www.waterboards.ca.gov/drinking_water/programs/compliance/docs/fs082415_mand_consolid_faq.pdf.

125 *Mandatory Consolidation or Extension of Service for Disadvantaged Communities*, Cal. Water Res. Control Bd. (last updated July 16, 2018), https://www.waterboards.ca.gov/drinking_water/programs/compliance/index.html.

126 Matt Weiser, *Dozens of Water Systems Consolidate in California's Farming Heartland*, KQED.com (June 11, 2018), https://www.kqed.org/science/1925560/dozens-of-water-systems-consolidate-in-californias-farming-heartland.

127 Larry Lai, Adopting County Policies which Limit Public Water System Sprawl and Promote Small System Consolidation at 17 tbl. 3 fn. (Luskin Center for Innovation, 2017), http://innovation.luskin.ucla.edu/sites/default/files/051917%20Adopting%20County%20Policies%20which%20Limit%20Public%20Water%20System%20Sprawl%20and%20Promote%20Small%20System%20Consolidation.pdf.

128 Carl Carlucci (Supervising Sanitary Engineer), State Water Resources Control Board Notice Regarding Mandatory Consolidation (Apr. 6, 2018), https://www.waterboards.ca.gov/drinking_water/programs/compliance/docs/2018/desert_breeze_mandatory_letter.pdf.

Law and Policy Options for Improving Small Water Systems

California has progressed in improving water access and quality for small water systems, but it can do more. By improving data access, supporting system consolidations, and expanding funding for small water system operation and maintenance, the state and other entities can help small water systems in L.A. County improve access to safe, affordable water.

Collect and publish more and better data

Data gaps make it difficult to evaluate the challenges faced by small water systems and the benefits of potential solutions. California should take steps to fill data gaps in at least three realms.

First, communities and policymakers lack sufficient data on water quality in small water systems. Water quality data is available for small systems under the SDWA, but those systems often do not test as often as larger systems. Small systems face increased burdens from frequent testing, due to their typically smaller resource pool. Policymakers have responded to this burden by allowing some small systems to test infrequently. But allowing any system—even an exemplary one—to go as much as nine years without lead testing increases the chance that deteriorating conditions go undiscovered in that period. Instead of extending the period between tests, the state could reduce burdens by funding testing. And although the state has taken steps towards ensuring lead testing in schools, more testing of drinking water in homes could lead to better understanding of where lead contamination is coming from and to eventual reductions in harm. Many of the smallest systems collect and publicly report far less water safety data than do larger systems.[129] Less data are available because many of these systems fall beneath the thresholds of the federal SDWA and the state Safe Drinking Water Act, which do not apply to systems serving fewer than 25 people or systems with fewer than 15 service connections.[130] Data on the health impacts of small water systems are also limited and underreported, but what exists is sufficient to warrant concern and to suggest that better assessment and reporting would be helpful both for evaluating the seriousness of the problem and for addressing it.[131]

Systems need better data on water pricing and customer income levels, especially in small water systems that serve disadvantaged communities.

Second, systems need better data on water pricing and customer income levels, especially in small water systems that serve disadvantaged communities. Researchers at the UCLA Luskin Center noted the difficulty in drawing out income levels across residential customer classes due to the lack of overlap between census tract data and the geographic bounds of water systems, especially small systems.[132] The same report noted the importance of figuring out water system customer income "for designing sustainable rate structures, conservation strategies, and low-income assistance programs."[133] It found that the California's environmental health screening tool might underrepresent disadvantaged communities, especially in smaller systems.[134] And it was

129 Jelena Jezdimirovic, Caitrin Chappelle & Ellen Hanak, Information Gaps Hinder Progress on Safe Drinking Water, Pub. Policy Inst. of Cal. (Jan 16, 2018), http://www.ppic.org/blog/information-gaps-hinder-progress-safe-drinking-water/ (*last visited* June 11, 2018).

130 2 USC § 300f(4)(A); Cal. Health and Safety Code § 116275.

131 EPA Office of the Inspector Gen., Much Effort and Resources Needed to Help Small Drinking Water Systems Overcome Challenges 33 (May 30, 2006, Report No. 2006-P-00026), https://www.epa.gov/sites/production/files/2015-11/documents/20060530-2006-p-00026.pdf.

132 Water Atlas at 24.

133 *Id.*

134 According to results from the Screening Tool, most L.A. County community water systems serving high percentages of disadvantaged communities are larger systems, such as those in densely populated areas. Because the Screening Tool performs its analysis by census tract, the tool blends small rural communities with larger population groups. For example, a poor, small, rural mobile home park may have its own water system, but in the census data, its mean household income data will be blended with a much larger surrounding community. The result would be a masking of its disadvantaged status. Water Atlas at 22.

unable to obtain pricing data for many smaller community systems that serve populations with lower median incomes.[135]

Third, California needs better data on the potential benefits and drawbacks of system consolidation. A recent Berkeley Law report identifies four areas of data gaps when considering consolidations. They are: (1) data on quality and quantity for private wells and some state water systems; (2) water rates and affordability; (3) the benefits of consolidations, including changes in property value, cost-savings, reliability improvements, and health benefits; and (4) effects on small system autonomy.[136] Given the Water Board's recently-expanded powers to consolidate systems, it is important to understand these aspects of consolidation much better than we do.

Acquiring data on both the harms that the smallest systems face, and the benefits and risks of consolidation, would enable the Water Board, decision makers at municipal and county levels, and water systems themselves to make better decisions.

Data gaps in each of these areas increase the risk of unsafe water and make it hard to assess the magnitude of that risk. Lack of data also makes it difficult for communities and policymakers to craft, compare, and decide on solutions, where needed. To remedy these gaps, the Water Board could collect, organize and publish data on small water systems, focusing on enhanced water quality testing and on pricing and affordability questions. Additionally, the Legislature could require the Water Board to gather data on costs and benefits of different types of water system consolidations in different local contexts. Acquiring data on both the harms that the smallest systems face, and the benefits and risks of consolidation, would enable the Water Board, decision makers at municipal and county levels, and water systems themselves to make better decisions.

To be sure, it can be difficult, expensive, and time consuming to collect data on small systems, but there are cooperative fixes. If action at the state level alone is infeasible, the Water Board could partner with counties—including L.A.—and community groups, universities, and nongovernmental organizations to collect, organize, and publish data about small systems. Alternately, the state, through the Legislature or the Water Board, could make one-time funding available to small systems to digitize data so that it is easier to track pricing, quality, and other relevant metrics. More modest than a long-term data collection initiative, such a program could increase the capability of small systems to self-monitor and to publish water quality data.

Support consolidation of failing small water systems

The Water Board has used its power to consolidate water systems sparingly to date, and it can aid small water systems by using this authority more aggressively. Consolidation is a complex process, and (as noted above) the Water Board does not yet have all the data it might want about the benefits and drawbacks of consolidation.

But experiences to date suggest that consolidations can greatly benefit those who rely on small water systems. Consolidation can be useful not only for water systems that currently fail to deliver safe water, but also for those at high risk of providing unsafe water in the future, of losing their supply due to contamination or drought, or of charging customers unsustainable and unaffordable rates. Other experts agree. One recent workshop on consolidation concluded that the Water Board should be more willing to mandate consolidation, especially "where there has been historic underinvestment or significant tension between the presumptive receiving system and the non-compliant system and voluntary consolidation is not occurring."[137]

135 Water Atlas at 47.

136 Nell Green Nylen et al., Learning from California's Experience with Small Water System Consolidations: A Workshop Synthesis at 9, (Berkeley Law, May 2018), https://www.law.berkeley.edu/wp-content/uploads/2018/05/SmallWaterSystemConsolidation_2018-05-02.pdf.

137 *Id.* at 14.

The Water Board's current authority is broad enough to begin this expansion, but California should also consider increasing the Water Board's authority and funding for consolidation, such as by expanding the Water Board's authority to include systems at high risk of providing unsafe water in the future, or producing unaffordable water, or of losing their supply due to contamination or drought.

Either the Legislature or the Water Board itself should create additional guidance on the criteria the Water Board must use to assess a water system as failing. Creating consistent and transparent criteria would enhance the fairness of consolidation procedures and alert communities early to the need for improving their level of service. These criteria could include metrics on current water quality, access, and affordability, and potentially also future risks such as encroaching groundwater contamination.

With or without these regulatory changes, the pace of consolidations will continue to be slow absent additional funding. Larger or better-performing water systems will still be loathe to take on the administrative and financial burdens associated with consolidating with those systems that are struggling. The Legislature should appropriate more money to fund consolidation efforts, which could both supplement needed infrastructural or managerial changes and reduce the need for a larger system to hike customer rates following consolidation. In enacting new water bonds and in legislation, policy makers could more explicitly marry a portion of future funding to the consolidation procedures authorized by SB 88 and SB 552. Such a move could make consolidations more feasible because the Water Board could use the money to build supplemental infrastructure for combining water systems or to backstop larger systems that fear absorbing a smaller system due to the potential costs.[138]

Increase operations and maintenance funding for small and medium water systems

For those systems for which consolidation is not a feasible option, funding is also needed to maintain existing systems and to support infrastructure and operations. No current funding source in California does much to aid smaller systems in paying for operations and maintenance of existing infrastructure, necessary improvements, or disaster planning. This should be remedied. For example, a fee-based system to fund water infrastructure and system maintenance could contribute to long-term access to safer water. One proposed bill, SB 623, aimed to address such issues and provide year-to-year funding for water projects.[139] SB 623 would have created a Safe and Affordable Drinking Water Fund for the Water Board to disburse to water projects, paid for by fees on ratepayers, dairy producers, and fertilizer manufacturers. The drafters of the bill described it as an attempt to secure safe drinking water access for the state's citizens, and to

138 The State Water Board is not the only agency that can act to address a failing system. The L.A. County Local Agency Formation Commission ("LAFCO") oversees changes to local government, including certain special districts that provide water. This year, it voted to dissolve a local water district in Compton, the Sativa Los Angeles County Water District, after years of mismanagement, alleged nepotism, and the production of brown, odorous water. The district had served about 6,800 people and had been unable to afford infrastructural repairs. The dissolution is subject to legal challenge and can be overturned by election. LAFCO's powers are limited in other ways, too; it lacks the authority to consolidate public agencies with private utilities, unlike the Water Board. Reducing the regulatory hurdles for county bodies, such as LAFCO, to implement dissolutions and consolidations could be pursued at both the state and the county levels. *'This Looks Like Urine': Brown Water From Faucets Has Compton Residents Seeing Red*, CBS, (May 2, 2018), *available at* https://losangeles.cbslocal.com/2018/05/02/compton-willowbrook-brown-water-sativa-county-water-district/; Angel Jennings & Ruben Vives, *Agency that delivered brown, smelly water to customers should be dissolved, board rules*, L.A. Times, http://www.latimes.com/local/lanow/la-me-ln-sativa-water-district-20180711-story.html.

139 SB-623, Water quality: Safe and Affordable Drinking Water Fund (re-referred to Cal. Senate Comm. on Rules Sept. 1, 2017).

ensure the long-term health of drinking water infrastructure and sustainability of service. The bill was delayed in 2017, and the legislature abandoned it in 2018.[140]

Moving forward, it is critically important for California to create a sustainable source of funds for smaller water systems in L.A. County and throughout the state.

Moving forward, it is critically important for California to create a sustainable source of funds for smaller water systems in L.A. County and throughout the state. Two recently proposed bills, SB 844 and 845, would have allowed ratepayers to elect to pay a water bill fee that would go to the Safe and Affordable Drinking Water Fund.[141] The bills would also levy fees on dairy and fertilizer interests. Such a fund could be used to support small water systems and to address many of the issues identified in this report. But, as with SB 623, SB 844 and 845 were not brought to a vote in the 2018 legislative session. SB 844 would have taxed fertilizer and dairy producers, and therefore required a two-thirds vote to pass.[142] SB 845 would have established a voluntary charge on ratepayers, requiring a majority vote in the legislature.[143] The Association of California Water Agencies argued that the increase in administrative costs from SB 844 would outweigh any benefit.[144] Additionally, lawmakers were reported to be hesitant to approve a tax increase, even a voluntary one, in an election year.[145] Moving forward, the Legislature and governor of California should move to enact similar statutes that create stable funding for small water systems.

Conclusion

California has set laudable goals for ensuring that all residents have access to clean, affordable drinking water. Though the state has taken steps toward achieving these goals, they remain largely aspirational for many communities, particularly those that depend on small water systems in L.A. County and throughout California. Most of the challenges that small water systems face are fundamentally funding problems. Those small water systems that struggle with water quality compliance or with reliability and affordability are generally undercapitalized. Of course, California needs not only to provide funding, as it does under mechanisms such as Proposition 1, but to structure funding and policy mechanisms so that they can address meaningfully the unique challenges smaller systems face.

To help smaller systems become more resilient, California should pursue: (1) improved data collection and dissemination essential to tracking small water systems; (2) greater use of the Water Board's current authority to pursue water system consolidations, along with an increase in the scope of that authority and more funding to support consolidation; and (3) greater funding for small water system operations and maintenance, infrastructural improvements, and disaster planning. These steps would benefit L.A. County's small water systems and help fulfill the promise of the state's right-to-water mandate.

140 Dale Kasler & Adam Ashton, *California drinking water tax dies in budget compromise*, The Sacramento Bee (June 8, 2018), *available at* https://www.sacbee.com/latest-news/article212827809.html; Guy Marzorati and Marisa Lagos, *Closely Watched Bills Killed by Legislative Spending Committees*, KQED.org (Sept. 1, 2017), https://ww2.kqed.org/news/2017/09/01/closely-watched-bills-killed-by-legislative-spending-committees/.

141 SB 844 (proposed 2018); SB 845 (proposed 2018).

142 SB 844 (proposed 2018).

143 SB 845 (proposed 2018).

144 *#Nowatertaxcampaign*, Association of California Water Agencies (Feb. 1, 2018), https://www.acwa.com/our-work/delivering-safe-drinking-water/no-water-tax/; *see also* Cindy Tuck, *My turn: Last-minute twist on the water tax won't work, (in Pro-con: A new tax to provide clean water)* Calmatters.org (Aug. 24, 2018), https://calmatters.org/articles/commentary/my-turn-last-minute-twist-on-the-water-tax-wont-work/.

145 Taryn Luna, *Push for drinking water tax dies in the California Legislature*, The Sacramento Bee (Aug. 24, 2018, updated Aug. 31, 2018), https://www.sacbee.com/news/politics-government/capitol-alert/article217664960.html.

Pritzker Briefs

PRITZKER ENVIRONMENTAL LAW AND POLICY BRIEFS

POLICY BRIEF NO. 11 | DECEMBER 2018

This policy paper is the eleventh of the Pritzker Environmental Law and Policy Briefs. The Pritzker Briefs are published by UCLA School of Law and the Emmett Institute on Climate Change and the Environment in conjunction with researchers from a wide range of academic disciplines and the broader environmental law community. They are intended to provide expert analysis to further public dialogue on important issues impacting the environment.

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ABOUT THE EMMETT INSTITUTE ON CLIMATE CHANGE AND THE ENVIRONMENT

http://www.law.ucla.edu/emmett

The Emmett Institute on Climate Change and the Environment is the leading law school center focused on climate change and other critical environmental issues. Founded in 2008 with a generous gift from Dan A. Emmett and his family, the Institute works across disciplines to develop and promote research and policy tools useful to decision makers locally, statewide, nationally and beyond. Our Institute serves as a premier source of environmental legal scholarship, nonpartisan expertise, policy analysis and training.

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UCLA SCHOOL OF LAW

Staff Report

March 13, 2019

Agenda Item No. 9.b.

Request for Proposals (RFPs) for Municipal Service Reviews (MSRs) for the Santa Clarita Valley Water Agency; the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village; and the Cities of La Mirada and Whittier

At the December 12, 2018 Meeting, the Commission approved the Sphere of Influence (SOI) Updates and MSR Schedule, to commence in early 2019. Consistent with that action, staff is requesting authority to issue three RFPs for MSRs for the Santa Clarita Valley Water Agency; the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village; and the Cities of La Mirada and Whittier. Upon approval, staff will publish the RFP on the LA LAFCO website, and transmit to potential proposers. Staff will evaluate all proposals received, and agendize a recommended award at a future Commission meeting.

Recommended Action:

Staff recommends that the Commission:

1. Direct staff to issue RFPs for MSRs for the Santa Clarita Valley Water Agency; the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village; and the Cities of La Mirada and Whittier; which are in substantial conformance with the attached RFPs, and subject to approval as to form and legality by Counsel.

REQUEST FOR PROPOSAL

MUNICIPAL SERVICE REVIEW OF THE SANTA CLARITA VALLEY WATER AGENCY

I. Objective

The Local Agency Formation Commission (LAFCO) for the County of Los Angeles is seeking proposals from professional service firms to perform a Municipal Service Review (MSR) of the Santa Clarita Valley Water Agency (SCVWA).

II. Background

The mandate for LAFCO to conduct service reviews is part of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act," California Government Code §56000 et seq.). Pursuant to Government Code Section 56425, "on or before January 1, 2008, and every five years thereafter, the Commission shall, as necessary, review and update each sphere of influence." Thus, LAFCO has determined it necessary to update the Sphere of influence (SOI) for the SCVWA.

This LAFCO is responsible for establishing, reviewing and updating Sphere of Influence boundaries for local agencies in Los Angeles County. This study will be conducted by a professional service firm under the direction of the LAFCO Executive Officer.

In December of 2018, staff presented the Commission with a work plan for its third round of MSRs, referred to as "MSR Round Three." Consistent with the Commission's direction, staff is soliciting proposals for the SCVWA MSR. At the close of the solicitation process, proposals will be evaluated, and staff will provide a recommendation for the selection of a firm to the Commission in a future agenda. Subject to the Commission's approval, the firm selected will be notified, and a contract will be executed consistent with the parameters of the proposal submitted.

III. Scope of Services

The Municipal Service Review shall provide the research and analysis to enable the Commission to make determinations on seven (7) topics as required, under the CKH Act, for purposes of adopting the municipal service review:

1) Growth and population projections for the affected area.
2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
3) Present and planned capacity of public facilities and adequacy of public services, adequacy of public services, infrastructure needs or deficiencies related to sewers, municipal and industrial

water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.

4) Financial ability of agencies to provide services.

5) Status of, and opportunities for, shared facilities.

6) Accountability for community service needs, including governmental structure and operational efficiencies.

7) Any other matter related to effective or efficient service delivery, as required by Commission policy. Specifically, this shall include, but be not limited to:

   a. Santa Clarita Valley Water Agency sanitary sewer services:

      i. Description of sanitary sewer infrastructure, services provided, and rates; and
      ii. Future service delivery options—including the potential transfer of sanitary sewer system, infrastructure, and responsibilities to another service provider.

   b. Los Angeles County Waterworks District No. 36—Val Verde (WWD36):

      i. Description of WWD36;
      ii. WWD36 functions and classes of services, pursuant to Government Code Section 56425 (i);
      iii. Relation of WWD36 to SCVWA; and
      iv. Future service delivery options for retail service within the boundaries of WWD36.

Sphere of Influence

In addition, the Municipal Service Review shall provide recommendations as to the most appropriate sphere of influence for the Santa Clarita Valley Water Agency. The review shall also identify those areas the SCVWA is serving outside of its boundaries and make recommendations regarding the future delivery of service to those areas. Hence, the Municipal Service Review shall also provide the research and analysis required for the Commission to make determinations on five (5) topics as required for determining the sphere of influence:

1) The present and planned land uses in the area, including agricultural and open-space lands.

2) The present and probable need for public facilities and services in the area.

3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g)* on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

[*(g) On or before January 1, 2008, and every five years thereafter, the commission shall, as necessary, review and update each sphere of influence.]

Functions and Classes of Services

Pursuant to Government Code Section 56425(i), the functions and classes of services of the Santa Clarita Valley Water Agency should be identified in the municipal services review and included in the determinations.

A *Scope of Services* is enclosed with this RFP as Attachment 1. A final statement of services to be provided will be negotiated with the firm selected to conduct the MSR and will be included as part of the professional services agreement to be approved by LAFCO.

IV. Price

A final firm cost for this project will be negotiated with the firm selected at a not-to-exceed cost for the work prior to an agreement that will be recommended to LAFCO for adoption.

Please note: LAFCO is not responsible for costs incurred in the preparation of a response to this RFP.

V. Schedule

Time is of the essence. The consultant shall submit as part of its proposal a timeline with reasonable review periods for the interim deliverables. The final schedule for this project will be negotiated with the firm selected for the work prior to an agreement being recommended to the Commission for adoption.

VI. Proposal Requirements

Responses to this RFP must include all of the following:

1. A statement about the firm that describes its history as well as the competencies and résumés of the principal and of all professionals who will be involved in the work. This statement should describe the firm's level of expertise in the following areas:

    - Management level understanding of how municipal services are financed and delivered in local governance;
    - Familiarity with the CKH, the role and functions of LAFCOs, and the service review process;
    - Experience in governmental organization analysis, including performance measurement and benchmarking techniques;
    - Ability to facilitate and synthesize input from a variety of stakeholders;
    - Ability to quickly interpret varied budget and planning documents; and

- Familiarity with public input processes and experience handling the presentation and dissemination of public information for review and comment.

2. Identification of the lead professional responsible for the project and identification of the professional(s) who will be performing the day-to-day work.
    a. Include any relevant experience and/or familiarity with local government municipal services, finances and government structures.
3. Identification of any associate consultant firms to be involved, if any. If associate consultant firm are proposed, describe the work they will perform and include the same information for each as required for items 1 and 2 above.
4. A statement of related experience with local government agency services and/or finances accomplished in the last two years.
5. Provide a list of at least three (3) client references, preferably government agencies. The reference list should include the client's/agency's name, address, telephone, email address, and location.
6. Provide any relevant websites for Municipal Service Reviews prepared by your firm.
7. A statement regarding the anticipated approach for this project, explicitly discussing and identifying suggested changes to the Scope of Services (*Attachment 1*).
8. Identification of any information, materials and/or work assistance required from LAFCO to complete the project.
9. An overall project schedule, including the timing of each work task.
10. Information about the availability of all the professionals who will be involved in the work, including any associate consultants.
11. A not-to-exceed total budget amount, including:
    a. Any out of pocket reimbursable expenses incurred by the firm, if any (i.e.: mileage, copies, postage, etc.)
12. Firm must hold and disclose valid business and/or professional licenses and registrations that may be required.

Proposal Terms and Conditions:

The selected firm shall maintain strict privacy of all LAFCO records, data, and files (regardless of media), including any copyrighted material received from LAFCO.

Marking the entire proposal or any one or more of the major sections as proprietary will neither be accepted nor honored. The firm should be aware that LAFCO is required by law to make certain records available for public inspection with certain exceptions. The firm, by submission of materials marked proprietary, acknowledges and agrees that LAFCO will have no obligation or liability to the firm in the event that LAFCO must disclose these materials.

Non-Discrimination & Equal Opportunity

Firm shall be an equal opportunity employer that does not discriminate in the provision of services, allocation of benefits, accommodation in facilities, or employment of personnel on the basis of ethnic group identification, race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status or sex in the performance of this Agreement; and, to the extent they shall be found to be applicable hereto, shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code 12900 et. seq), the Federal Civil Rights Act of 1964 (P.L. 88-352), the Americans with Disabilities Act of 1990 (42 U.S.C. S1210 et seq.) and all other applicable laws or regulations.

Conflict of Interest

There shall be no Conflict of Interest with firm selected. Proposers warrant and covenant that no official or employee of the Los Angeles LAFCO, nor any business entity in which an official of the Los Angeles LAFCO has an interest, has been employed or retained to solicit or aid in the procuring of the resulting contract, nor that any such person will be employed in the performance of such contract without immediate divulgence of such fact to the Los Angeles LAFCO. Proposers will notify LAFCO of any potential conflict of interest regarding other work or third-party contracts.

Insurance Requirements

Evidence of Insurance - Before commencing any operations under a contract, the proposer awarded the contract will be subject to Los Angeles LAFCO's requirements for insurance reflecting the minimum amounts and conditions as defined by Los Angeles LAFCO. These include and are not limited to:

1. ***Workers' Compensation***: The successful proposer shall procure and maintain for the life of the resulting contract Workers' Compensation Insurance covering all employees with limits meeting all applicable state and federal laws. This coverage shall include Employer's Liability with limits meeting all applicable state and federal laws. This coverage shall extend to any subcontractor that does not have their own Workers' Compensation and Employer's Liability Insurance.

2. ***Commercial General Liability***: The successful proposer shall procure and maintain for the life of the resulting contract Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury covering claims which may arise from or out of the selected proposer's performance of its obligations hereunder. Policy shall name LAFCO, its Commissioners, officers, employees, agents and representatives as Additional Insureds. Policy's limit of liability shall not be less than **$1,000,000** per occurrence combined single limit.

3. ***Vehicle Liability***: If the successful proposer's vehicles or mobile equipment are used in the performance of the obligations, resulting from its selection as the future contractor, the

successful proposer shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than **$1,000,000** per occurrence combined single limit for the life of the resulting contract. If such insurance contains a general aggregate limit, it shall apply separately to the resulting future contract, or be no less than two (2) times the occurrence limit. Policy shall name LAFCO, its Commissioners, officers, employees, agents and representatives as Additional Insureds.

4. ***Professional Liability Insurance***: The successful proposer shall procure and maintain for the life of the resulting contract Professional Liability Insurance providing coverage for its performance of work included in the resulting future contract, with a limit of liability of not less than **$1,000,000** per occurrence and **$2,000,000** annual aggregate.

Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are waived, in writing, by LAFCO. If LAFCO waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

The successful proposer shall furnish the Los Angeles LAFCO with a Certificate of Insurance and copies of all applicable endorsements evidencing compliance with the above insurance requirements and that such insurance will not be canceled or materially changed without thirty (30) days advance written notice.

VII. Submittal Requirements

LAFCO must receive responses to this RFP no later than the date and time specified. Proposals received after the due date will not be accepted. No additional time will be granted to any firm unless by addendum to this RFP.

DUE DATE:

On or before 5:00 P.M., Thursday, May 2, 2019.

NUMBER OF COPIES:

1 complete reproducible copy

If delivering in person or by mail: 1 original hard copy (unbound)

DELIVER TO OR EMAIL TO: ( )

Adriana Romo, Deputy Executive Officer
Local Agency Formation Commission for the County of Los Angeles
80 South Lake Avenue, Ste. 870
Pasadena, CA 91101
Email: aromo@lalafco.org

Note: If delivery is to be in person, please first call the LAFCO office (626) 204-6500 to arrange a delivery time. If the proposal will be submitted electronically, please provide a complete

reproductible copy by the due date and time. *Cost for the preparation of proposals shall be borne by the proposers.*

VIII. Selection Process

LAFCO reserves the sole right to judge the contents of the proposals submitted pursuant to this RFP and to review, evaluate and select the successful proposal(s). Each responsive proposal will be evaluated and scored by an evaluation committee selected by LAFCO.

Following selection of the most qualified firm, a recommended agreement including budget, schedule, and Scope of Services statement will be negotiated. **Final selection by Commission is anticipated by June 12, 2019.**

IX. LAFCO Contact

Adriana Romo, Deputy Executive Officer
Local Agency Formation Commission for the County of Los Angeles
Phone: (626) 204-6500
Email: aromo@lalafco.org

XI. Reference Information

For general information about LAFCO, refer to the LAFCO web site: www.lalafco.org

Scope of Services
Municipal Service Review
Santa Clarita Valley Water Agency

Municipal Service Review

The municipal service review shall provide the research and analysis to enable the Commission to make determinations on seven (7) topics as required under the CKH Act for purposes of adopting the municipal service review:

1) Growth and population projections for the affected area.
2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
3) Present and planned capacity of public facilities and adequacy of public services, adequacy of public services, infrastructure needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.
4) Financial ability of agencies to provide services.
5) Status of, and opportunities for, shared facilities.
6) Accountability for community service needs, including governmental structure and operational efficiencies.
8) Any other matter related to effective or efficient service delivery, as required by Commission policy. Specifically, this shall include, but not be limited to:
    a. Santa Clarita Valley Water Agency sanitary sewer services:
        i. Description of sanitary sewer infrastructure, services provided, and rates; and
        ii. Future service delivery options—including the potential transfer of sanitary sewer system, infrastructure, and responsibilities to another service provider.
    b. Los Angeles County Waterworks District No. 36—Val Verde (WWD36):
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Sphere of Influence

In addition, the municipal service review shall provide recommendations as to the most appropriate sphere of influence for the Santa Clarita Valley Water Agency. The review shall also identify those areas SCVWA is serving outside of its boundaries and make recommendations regarding the future delivery of service to

those areas. Hence, the municipal service review shall also provide the research and analysis required for the Commission to make determinations on five (5) topics as required for determining the sphere of influence:

1) The present and planned land uses in the area, including agricultural and open-space lands.

2) The present and probable need for public facilities and services in the area.

3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g)* on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

   [*(g) On or before January 1, 2008, and every five years thereafter, the commission shall, as necessary, review and update each sphere of influence.]

Functions and Classes of Services

Pursuant to Government Code Section 56425(i), the functions and classes of services of the Santa Clarita Valley Water Agency should be identified in the municipal services review and included in the determinations.

Local Context/Issues Identification

The study will include not only the existing boundaries of the Santa Clarita Valley Water Agency but will also concentrate on the future planned growth of the area beyond the existing borders, identified as the sphere of influence. Furthermore, the study must include the proposed growth and any future annexation proposals contemplated by SCVWA.

Service Review Objectives and Guidelines

LAFCO is committed to conducting municipal service reviews in a fair, accurate and objective manner. The Commission wishes to provide effective and meaningful opportunities for public participation in the review process. The firm selected shall host a community meeting in the Santa Clarita Valley to inform the general public of the Municipal Service Review process and solicit input.

Project Management and Initiation

Consultant will meet with LAFCO staff to ensure initial understanding of project scope and objectives, define roles, responsibilities, and lines of communication.

Work Plan

A. Process: At a minimum, preparation of the service review will include the following steps, although other activities may be necessary:

- Data collection and interviews with key SCVWA staff and board members;
- Consultant's independent verification of submitted data;
- Host one community meeting in the Santa Clarita Valley to solicit input;
- Analysis of data and preparation of preliminary findings;
- Presentation of preliminary findings to key agency and LAFCO staff;
- Preparation of an Administrative Review Draft Municipal Services Report to be circulated internally to the subject agency, affected agencies and LAFCO staff;
- Preparation of a Public Review Draft Municipal Service Review that includes agency comments and/or clarifications, as deemed appropriate by LAFCO staff;
- Publication and public release of the draft report; this will begin the public comment period;
- Preparation of final draft, including responses to comments and recommended determinations for each of the factors required for the MSR and a SOI review/update as identified in the *Scope of Services* and responses to comments;
- Presentation of final report to Commission at public hearing;
- Commission's adoption of report and determinations;

Research Questions

The Municipal Service Review must include data and analysis upon which the Commission's determinations on the items required by Sections 56425 and 56430 of the Government Code can be based. Hence, the MSR shall address at a minimum the following research questions:

- What functions and classes of services is the Santa Clarita Valley Water Agency currently providing?
- How much population growth is anticipated within the Santa Clarita Water Agency boundaries and sphere of influence over the next 5, 10, 15 years?
- What is the anticipated increase of water demand expected within the Santa Clarita Valley Water Agency and sphere of influence over the next 5, 10, 15 years?
- What is the current adequacy of service provided within the area of interest?

- To what extent are service providers able to meet anticipated growth in demand for water services in the area of interest?
- What are the present and planned land uses within the existing sphere of influence?
- What contiguous areas could potentially be included in the Santa Clarita Valley Water Agency's sphere of influence?
- What is the current capacity of public facilities and adequacy of public services that Santa Clarita Valley Water Agency is interested in providing?
- What opportunities exist for service providers in and near the area of interest to share public facilities to more effectively and efficiently deliver services?
- Do the service providers of interest have adequate public facilities and other infrastructure to accommodate anticipated growth in service demand in the area of interest?
- What cost avoidance opportunities, financing constraints and financing opportunities exist in providing municipal services to the area of interest?
- What alternative delivery options exist relevant to future water provisions to the areas of interest, and what are the advantages and disadvantages of consolidating or reorganizing service providers?
- To what extent are service providers in the area of interest accountable to the population being served?
- What governance structures currently exist among the service providers of interest?
- What is the consultant's evaluation of current and potential management efficiencies as they relate to optimal service provision and optimal spheres of influence?

Draft Municipal Service Review Report

The Draft Municipal Service Review Report will consist of the following:

- An analysis of the data collected and preparation of preliminary findings and presentation of those findings to key staff for review and comment.
- The report shall provide research, analysis, and recommendations for the relevant findings and determinations with respect to Government Code Sections 56425 and 56430.
- Circulation of Draft Municipal Service Review.

REQUEST FOR PROPOSAL

MUNICIPAL SERVICE REVIEW OF THE CITIES OF AGOURA HILLS, CALABASAS, HIDDEN HILLS AND WESTLAKE VILLAGE

I. Objective

The Local Agency Formation Commission (LAFCO) for the County of Los Angeles is seeking proposals from professional service firms to perform a Municipal Service Review (MSR) of the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village.

II. Background

The mandate for LAFCO to conduct service reviews is part of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act," California Government Code §56000 et seq.). Pursuant to Government Code Section 56425, "on or before January 1, 2008, and every five years thereafter, the Commission shall, as necessary, review and update each sphere of influence." Thus, LAFCO has determined it necessary to update the Spheres of influence (SOI) for the Cities of Agoura Hills, Calabasas, Hidden Hills and Westlake Village.

This LAFCO is responsible for establishing, reviewing and updating Sphere of Influence boundaries for local agencies in Los Angeles County. This study will be conducted by a professional service firm under the direction of the LAFCO Executive Officer.

In December of 2018, staff presented the Commission with a work plan for its third round of MSRs, referred to as "MSR Round Three." Consistent with the Commission's direction, staff is soliciting proposals for the Cities of Agoura Hills, Calabasas, Hidden Hills and Westlake Village MSR. At the close of the solicitation process, proposals will be evaluated, and staff will provide a recommendation for the selection of a firm to the Commission in a future agenda. Subject to the Commission's approval, the firm selected will be notified, and a contract will be executed consistent with the parameters of the proposal submitted.

III. Scope of Services

The Municipal Service Review shall provide the research and analysis to enable the Commission to make determinations on seven (7) topics as required, under the CKH Act, for purposes of adopting the municipal service review:

1) Growth and population projections for the affected area.

2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.

3) Present and planned capacity of public facilities and adequacy of public services, adequacy of public services, infrastructure needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.

4) Financial ability of agencies to provide services.

5) Status of, and opportunities for, shared facilities.

6) Accountability for community service needs, including governmental structure and operational efficiencies.

7) Any other matter related to effective or efficient service delivery, as required by Commission policy.

Sphere of Influence

In addition, the Municipal Service Review shall provide recommendations as to the most appropriate sphere of influence for each city. The review shall also identify those areas any of the cities are serving outside of its boundaries and make recommendations regarding the future delivery of service to those areas. Hence, the Municipal Service Review shall also provide the research and analysis required for the Commission to make determinations on five (5) topics as required for determining the sphere of influence:

1) The present and planned land uses in the area, including agricultural and open-space lands.

2) The present and probable need for public facilities and services in the area.

3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.

4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g)* on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

[*(g) On or before January 1, 2008, and every five years thereafter, the commission shall, as necessary, review and update each sphere of influence.]

A *Scope of Services* is enclosed with this RFP as Attachment 1. A final statement of services to be provided will be negotiated with the firm selected to conduct the MSR and will be included as part of the professional services agreement to be approved by LAFCO.

IV. Price

A final firm cost for this project will be negotiated with the firm selected at a not-to-exceed cost for the work prior to an agreement that will be recommended to LAFCO for adoption.

Please note: LAFCO is not responsible for costs incurred in the preparation of a response to this RFP.

V. Schedule

Time is of the essence. The consultant shall submit as part of its proposal a timeline with reasonable review periods for the interim deliverables. The final schedule for this project will be negotiated with the firm selected for the work prior to an agreement being recommended to the Commission for adoption.

VI. Proposal Requirements

Responses to this RFP must include all of the following:

1. A statement about the firm that describes its history as well as the competencies and résumés of the principal and of all professionals who will be involved in the work. This statement should describe the firm's level of expertise in the following areas:
    - Management level understanding of how municipal services are financed and delivered in local governance;
    - Familiarity with the CKH, the role and functions of LAFCOs, and the service review process;
    - Experience in governmental organization analysis, including performance measurement and benchmarking techniques;
    - Ability to facilitate and synthesize input from a variety of stakeholders;
    - Ability to quickly interpret varied budget and planning documents; and
    - Familiarity with public input processes and experience handling the presentation and dissemination of public information for review and comment.
2. Identification of the lead professional responsible for the project and identification of the professional(s) who will be performing the day-to-day work.
    a. Include any relevant experience and/or familiarity with local government municipal services, finances and government structures.
3. Identification of any associate consultant firms to be involved, if any. If associate consultant firm are proposed, describe the work they will perform and include the same information for each as required for items 1 and 2 above.
4. A statement of related experience with local government agency services and/or finances accomplished in the last two years.

5. Provide a list of at least three (3) client references, preferably government agencies. The reference list should include the client's/agency's name, address, telephone, email address, and location.
6. Provide any relevant websites for Municipal Service Reviews prepared by your firm.
7. A statement regarding the anticipated approach for this project, explicitly discussing and identifying suggested changes to the Scope of Services (*Attachment 1*).
8. Identification of any information, materials and/or work assistance required from LAFCO to complete the project.
9. An overall project schedule, including the timing of each work task.
10. Information about the availability of all the professionals who will be involved in the work, including any associate consultants.
11. A not-to-exceed total budget amount, including:
    a. Any out of pocket reimbursable expenses incurred by the firm, if any (i.e.: mileage, copies, postage, etc.)
12. Firm must hold and disclose valid business and/or professional licenses and registrations that may be required.

Proposal Terms and Conditions:

The selected firm shall maintain strict privacy of all LAFCO records, data and files (regardless of media), including any copyrighted material received from LAFCO.

Marking the entire proposal or any one or more of the major sections as proprietary will neither be accepted nor honored. The firm should be aware that LAFCO is required by law to make certain records available for public inspection with certain exceptions. The firm, by submission of materials marked proprietary, acknowledges and agrees that LAFCO will have no obligation or liability to the firm in the event that LAFCO must disclose these materials.

Non-Discrimination & Equal Opportunity

Firm shall be an equal opportunity employer that does not discriminate in the provision of services, allocation of benefits, accommodation in facilities, or employment of personnel on the basis of ethnic group identification, race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status or sex in the performance of this Agreement; and, to the extent they shall be found to be applicable hereto, shall comply with the provisions of the California Fair Employment and Housing Act (Gov. Code 12900 et. seq), the Federal Civil Rights Act of 1964 (P.L. 88-352), the Americans with Disabilities Act of 1990 (42 U.S.C. S1210 et seq.) and all other applicable laws or regulations.

Conflict of Interest

There shall be no Conflict of Interest with firm selected. Proposers warrant and covenant that no official or employee of the Los Angeles LAFCO, nor any business entity in which an official of the Los

Angeles LAFCO has an interest, has been employed or retained to solicit or aid in the procuring of the resulting contract, nor that any such person will be employed in the performance of such contract without immediate divulgence of such fact to the Los Angeles LAFCO. Proposers will notify LAFCO of any potential conflict of interest regarding other work or third-party contracts.

Insurance Requirements

Evidence of Insurance - Before commencing any operations under a contract, the proposer awarded the contract will be subject to Los Angeles LAFCO's requirements for insurance reflecting the minimum amounts and conditions as defined by Los Angeles LAFCO. These include and are not limited to:

1. ***Workers' Compensation***: The successful proposer shall procure and maintain for the life of the resulting contract Workers' Compensation Insurance covering all employees with limits meeting all applicable state and federal laws. This coverage shall include Employer's Liability with limits meeting all applicable state and federal laws. This coverage shall extend to any subcontractor that does not have their own Workers' Compensation and Employer's Liability Insurance.

2. ***Commercial General Liability***: The successful proposer shall procure and maintain for the life of the resulting contract Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury covering claims which may arise from or out of the selected proposer's performance of its obligations hereunder. Policy shall name LAFCO, its Commissioners, officers, employees, agents and representatives as Additional Insureds. Policy's limit of liability shall not be less than **$1,000,000** per occurrence combined single limit.

3. ***Vehicle Liability***: If the successful proposer's vehicles or mobile equipment are used in the performance of the obligations, resulting from its selection as the future contractor, the successful proposer shall maintain liability insurance for all owned, non-owned or hired vehicles so used in an amount not less than **$1,000,000** per occurrence combined single limit for the life of the resulting contract. If such insurance contains a general aggregate limit, it shall apply separately to the resulting future contract, or be no less than two (2) times the occurrence limit. Policy shall name LAFCO, its Commissioners, officers, employees, agents and representatives as Additional Insureds.

4. ***Professional Liability Insurance***: The successful proposer shall procure and maintain for the life of the resulting contract Professional Liability Insurance providing coverage for its performance of work included in the resulting future contract, with a limit of liability of not less than **$1,000,000** per occurrence and **$2,000,000** annual aggregate.

Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are

waived, in writing, by LAFCO. If LAFCO waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

The successful proposer shall furnish the Los Angeles LAFCO with a Certificate of Insurance and copies of all applicable endorsements evidencing compliance with the above insurance requirements and that such insurance will not be canceled or materially changed without thirty (30) days advance written notice.

VII. Submission Requirements

LAFCO must receive responses to this RFP no later than the date and time specified. Proposals received after the due date will not be accepted. No additional time will be granted to any firm unless by addendum to this RFP.

DUE DATE:

On or before 5:00 P.M., Thursday, May 2, 2019.

NUMBER OF COPIES:

1 complete reproducible copy

If delivering in person or by mail: 1 original hard copy (unbound)

DELIVER TO OR EMAIL TO: (*Email submittal is preferred.)*

Adriana Romo, Deputy Executive Officer
Local Agency Formation Commission for the County of Los Angeles
80 South Lake Avenue, Ste. 870
Pasadena, CA 91101
Email: aromo@lalafco.org

Note: If delivery is to be in person, please first call the LAFCO office (626) 204-6500 to arrange a delivery time. If the proposal will be submitted electronically, please provide a complete reproductible copy by the due date and time. *Cost for the preparation of proposals shall be borne by the proposers.*

VIII. Selection Process

LAFCO reserves the sole right to judge the contents of the proposals submitted pursuant to this RFP and to review, evaluate and select the successful proposal(s). Each responsive proposal will be evaluated and scored by an evaluation committee selected by LAFCO.

Following selection of the most qualified firm, a recommended agreement including budget, schedule, and Scope of Services statement will be negotiated. **Final selection by Commission is anticipated by June 12, 2019.**

IX. LAFCO Contact

Adriana Romo, Deputy Executive Officer
Local Agency Formation Commission for the County of Los Angeles
Phone: (626) 204-6500
Email: aromo@lalafco.org

XI. Reference Information

For general information about LAFCO, refer to the LAFCO web site: www.lalafco.org

Scope of Services
Municipal Service Review
Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village

Municipal Service Review

The municipal service review shall provide the research and analysis to enable the Commission to make determinations on seven (7) topics as required under the CKH Act for purposes of adopting the municipal service review:

1) Growth and population projections for the affected area.
2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
3) Present and planned capacity of public facilities and adequacy of public services, adequacy of public services, infrastructure needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.
4) Financial ability of agencies to provide services.
5) Status of, and opportunities for, shared facilities.
6) Accountability for community service needs, including governmental structure and operational efficiencies.
8) Any other matter related to effective or efficient service delivery, as required by Commission policy.

Sphere of Influence

In addition, the municipal service review shall provide recommendations as to the most appropriate sphere of influence for each city. The review shall also identify those areas any of the cities are serving outside of its boundaries and make recommendations regarding the future delivery of service to those areas. Hence, the municipal service review shall also provide the research and analysis required for the Commission to make determinations on five (5) topics as required for determining the sphere of influence:

1) The present and planned land uses in the area, including agricultural and open-space lands.
2) The present and probable need for public facilities and services in the area.
3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g)* on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

   [*(g) On or before January 1, 2008, and every five years thereafter, the commission shall, as necessary, review and update each sphere of influence.]

Local Context/Issues Identification

The study will include not only the existing boundaries of each of the four cities but will also concentrate on the future planned growth of the area beyond the existing borders, identified as the sphere of influence. Furthermore, the study must include the proposed growth and any future annexation proposals contemplated by each of the cities.

Service Review Objectives and Guidelines

LAFCO is committed to conducting municipal service reviews in a fair, accurate and objective manner. The Commission wishes to provide effective and meaningful opportunities for public participation in the review process. The firm selected shall host a community meeting to inform the general public of the Municipal Service Review process and solicit input.

Project Management and Initiation

Consultant will meet with LAFCO staff to ensure initial understanding of project scope and objectives, define roles, responsibilities, and lines of communication.

Work Plan

A. Process: At a minimum, preparation of the service review will include the following steps, although other activities may be necessary:

- Data collection and interviews with key city staff;
- Consultant's independent verification of submitted data;
- Host one (1) community meeting to solicit input;
- Analysis of data and preparation of preliminary findings;
- Presentation of preliminary findings to key agency and LAFCO staff;
- Preparation of an Administrative Review Draft Municipal Services Report to be circulated internally to the subject agency, affected agencies and LAFCO staff;
- Preparation of a Public Review Draft Municipal Service Review that includes agency comments and/or clarifications, as deemed appropriate by LAFCO staff;
- Publication and public release of the draft report; this will begin the public comment period;
- Preparation of final draft, including responses to comments and recommended determinations for each of the factors required for the MSR and a SOI review/update as identified in the *Scope of Services* and responses to comments;
- Presentation of final report to Commission at public hearing;
- Commission's adoption of report and determinations;

Research Questions

The Municipal Service Review must include data and analysis upon which the Commission's determinations on the items required by Sections 56425 and 56430 of the Government Code can be based. Hence, the MSR shall address at a minimum the following research questions for each of the four cities:

- What municipal services are currently provided by the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village?
- How much population growth is anticipated within each of the cities and sphere of influence over the next 5, 10, 15 years?
- What is the anticipated increase in municipal service demand expected within each of the city limits and sphere of influence over the next 5, 10, 15 years?
- What is the current adequacy of service provided within the area of interest?

- To what extent are service providers able to meet anticipated growth in demand for water services in the area of interest?
- What are the present and planned land uses within the existing sphere of influence?
- What contiguous areas could potentially be included in the Cities of Agoura Hills, Calabasas, Hidden Hills, and Westlake Village spheres of influence?
- What is the current capacity of public facilities and adequacy of public services that each of the cities is interested in providing?
- What opportunities exist for service providers in and near the area of interest to share public facilities to more effectively and efficiently deliver services?
- Do the service providers of interest have adequate public facilities and other infrastructure to accommodate anticipated growth in service demand in the area of interest?
- What cost avoidance opportunities, financing constraints and financing opportunities exist in providing municipal services to the area of interest?
- What alternative delivery options exist relevant to future water provisions to the areas of interest, and what are the advantages and disadvantages of consolidating or reorganizing service providers?
- To what extent are service providers in the area of interest accountable to the population being served?
- What governance structures currently exist among the service providers of interest?
- What is the consultant's evaluation of current and potential management efficiencies as they relate to optimal service provision and optimal spheres of influence?

Draft Municipal Service Review Report

The Draft Municipal Service Review Report will consist of the following:

- An analysis of the data collected and preparation of preliminary findings and presentation of those findings to key staff for review and comment.
- The report shall provide research, analysis, and recommendations for the relevant findings and determinations with respect to Government Code Sections 56425 and 56430.
- Circulation of Draft Municipal Service Review.

REQUEST FOR PROPOSAL

MUNICIPAL SERVICE REVIEW OF THE CITIES OF LA MIRADA AND WHITTIER

I. Objective

The Local Agency Formation Commission (LAFCO) for the County of Los Angeles is seeking proposals from professional service firms to perform a Municipal Service Review (MSR) of the Cities of La Mirada and Whittier.

II. Background

The mandate for LAFCO to conduct service reviews is part of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 ("CKH Act," California Government Code §56000 et seq.). Pursuant to Government Code Section 56425, "on or before January 1, 2008, and every five years thereafter, the Commission shall, as necessary, review and update each sphere of influence." Thus, LAFCO has determined it necessary to update the Spheres of influence (SOI) for the Cities of La Mirada and Whittier.

This LAFCO is responsible for establishing, reviewing and updating Sphere of Influence boundaries for local agencies in Los Angeles County. This study will be conducted by a professional service firm under the direction of the LAFCO Executive Officer.

In December of 2018, staff presented the Commission with a work plan for its third round of MSRs, referred to as "MSR Round Three." Consistent with the Commission's direction, staff is soliciting proposals for the Cities of La Mirada and Whittier MSR. At the close of the solicitation process, proposals will be evaluated, and staff will provide a recommendation for the selection of a firm to the Commission in a future agenda. Subject to the Commission's approval, the firm selected will be notified, and a contract will be executed consistent with the parameters of the proposal submitted.

III. Scope of Services

The Municipal Service Review shall provide the research and analysis to enable the Commission to make determinations on seven (7) topics as required, under the CKH Act, for purposes of adopting the municipal service review:

1) Growth and population projections for the affected area.
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4) Financial ability of agencies to provide services.

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Sphere of Influence

In addition, the Municipal Service Review shall provide recommendations as to the most appropriate sphere of influence for each city. The review shall also identify those areas any of the cities are serving outside of its boundaries and make recommendations regarding the future delivery of service to those areas. Hence, the Municipal Service Review shall also provide the research and analysis required for the Commission to make determinations on five (5) topics as required for determining the sphere of influence:

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A *Scope of Services* is enclosed with this RFP as Attachment 1. A final statement of services to be provided will be negotiated with the firm selected to conduct the MSR and will be included as part of the professional services agreement to be approved by LAFCO.

IV. Price

A final firm cost for this project will be negotiated with the firm selected at a not-to-exceed cost for the work prior to an agreement that will be recommended to LAFCO for adoption.

Please note: LAFCO is not responsible for costs incurred in the preparation of a response to this RFP.

V. Schedule

Time is of the essence. The consultant shall submit as part of its proposal a timeline with reasonable review periods for the interim deliverables. The final schedule for this project will be negotiated with the firm selected for the work prior to an agreement being recommended to the Commission for adoption.

VI. Proposal Requirements

Responses to this RFP must include all of the following:

1. A statement about the firm that describes its history as well as the competencies and résumés of the principal and of all professionals who will be involved in the work. This statement should describe the firm's level of expertise in the following areas:
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    - Familiarity with public input processes and experience handling the presentation and dissemination of public information for review and comment.
2. Identification of the lead professional responsible for the project and identification of the professional(s) who will be performing the day-to-day work.
    a. Include any relevant experience and/or familiarity with local government municipal services, finances and government structures.
3. Identification of any associate consultant firms to be involved, if any. If associate consultant firm are proposed, describe the work they will perform and include the same information for each as required for items 1 and 2 above.
4. A statement of related experience with local government agency services and/or finances accomplished in the last two years.

5. Provide a list of at least three (3) client references, preferably government agencies. The reference list should include the client's/agency's name, address, telephone, email address, and location.
6. Provide any relevant websites for Municipal Service Reviews prepared by your firm.
7. A statement regarding the anticipated approach for this project, explicitly discussing and identifying suggested changes to the Scope of Services (*Attachment 1*).
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10. Information about the availability of all the professionals who will be involved in the work, including any associate consultants.
11. A not-to-exceed total budget amount, including:
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1. ***Workers' Compensation***: The successful proposer shall procure and maintain for the life of the resulting contract Workers' Compensation Insurance covering all employees with limits meeting all applicable state and federal laws. This coverage shall include Employer's Liability with limits meeting all applicable state and federal laws. This coverage shall extend to any subcontractor that does not have their own Workers' Compensation and Employer's Liability Insurance.

2. ***Commercial General Liability***: The successful proposer shall procure and maintain for the life of the resulting contract Commercial General Liability insurance coverage, including but not limited to, premises liability, contractual liability, products and completed operations liability, personal and advertising injury covering claims which may arise from or out of the selected proposer's performance of its obligations hereunder. Policy shall name LAFCO, its Commissioners, officers, employees, agents and representatives as Additional Insureds. Policy's limit of liability shall not be less than **$1,000,000** per occurrence combined single limit.

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Any insurance carrier providing insurance coverage hereunder shall be admitted to the State of California and have an A M BEST rating of not less than A: VIII (A:8) unless such requirements are waived, in writing, by LAFCO. If LAFCO waives a requirement for a particular insurer such waiver is only valid for that specific insurer and only for one policy term.

The successful proposer shall furnish the Los Angeles LAFCO with a Certificate of Insurance and copies of all applicable endorsements evidencing compliance with the above insurance requirements and that such insurance will not be canceled or materially changed without thirty (30) days advance written notice.

VII. Submittal Requirements

LAFCO must receive responses to this RFP no later than the date and time specified. Proposals received after the due date will not be accepted. No additional time will be granted to any firm unless by addendum to this RFP.

DUE DATE:

On or before 5:00 P.M., Thursday, May 2, 2019.

NUMBER OF COPIES:

1 complete reproducible copy

If delivering in person or by mail: 1 original hard copy (unbound)

DELIVER TO OR EMAIL TO: (*Email submittal is preferred.*)

Adriana Romo, Deputy Executive Officer
Local Agency Formation Commission for the County of Los Angeles
80 South Lake Avenue, Ste. 870
Pasadena, CA 91101
Email: aromo@lalafco.org

Note: If delivery is to be in person, please first call the LAFCO office (626) 204-6500 to arrange a delivery time. If the proposal will be submitted electronically, please provide a complete reproductible copy by the due date and time. *Cost for the preparation of proposals shall be borne by the proposers.*

VIII. Selection Process

LAFCO reserves the sole right to judge the contents of the proposals submitted pursuant to this RFP and to review, evaluate and select the successful proposal(s). Each responsive proposal will be evaluated and scored by an evaluation committee selected by LAFCO.

Following selection of the most qualified firm, a recommended agreement including budget, schedule, and Scope of Services statement will be negotiated. **Final selection by Commission is anticipated by June 12, 2019.**

IX. LAFCO Contact

Adriana Romo, Deputy Executive Officer
Local Agency Formation Commission for the County of Los Angeles
Phone: (626) 204-6500
Email: aromo@lalafco.org

XI. Reference Information

For general information about LAFCO, refer to the LAFCO web site: www.lalafco.org

Scope of Services
Municipal Service Review
Cities of La Mirada and Whittier

Municipal Service Review

The municipal service review shall provide the research and analysis to enable the Commission to make determinations on seven (7) topics as required under the CKH Act for purposes of adopting the municipal service review:

1) Growth and population projections for the affected area.
2) The location and characteristics of any disadvantaged unincorporated communities within or contiguous to the sphere of influence.
3) Present and planned capacity of public facilities and adequacy of public services, adequacy of public services, infrastructure needs or deficiencies related to sewers, municipal and industrial water, and structural fire protection in any disadvantaged, unincorporated communities within or contiguous to the sphere of influence.
4) Financial ability of agencies to provide services.
5) Status of, and opportunities for, shared facilities.
6) Accountability for community service needs, including governmental structure and operational efficiencies.
8) Any other matter related to effective or efficient service delivery, as required by Commission policy.

Sphere of Influence

In addition, the municipal service review shall provide recommendations as to the most appropriate sphere of influence for each city. The review shall also identify those areas any of the cities are serving outside of its boundaries and make recommendations regarding the future delivery of service to those areas. Hence, the municipal service review shall also provide the research and analysis required for the Commission to make determinations on five (5) topics as required for determining the sphere of influence:

1) The present and planned land uses in the area, including agricultural and open-space lands.
2) The present and probable need for public facilities and services in the area.
3) The present capacity of public facilities and adequacy of public services that the agency provides or is authorized to provide.
4) The existence of any social or economic communities of interest in the area if the commission determines that they are relevant to the agency.

5) For an update of a sphere of influence of a city or special district that provides public facilities or services related to sewers, municipal and industrial water, or structural fire protection, that occurs pursuant to subdivision (g)* on or after July 1, 2012, the present and probable need for those public facilities and services of any disadvantaged unincorporated communities within the existing sphere of influence.

   [*(g) On or before January 1, 2008, and every five years thereafter, the commission shall, as necessary, review and update each sphere of influence.]

Local Context/Issues Identification

The study will include not only the existing boundaries of each of the four cities but will also concentrate on the future planned growth of the area beyond the existing borders, identified as the sphere of influence. Furthermore, the study must include the proposed growth and any future annexation proposals contemplated by each of the cities.

Service Review Objectives and Guidelines

LAFCO is committed to conducting municipal service reviews in a fair, accurate and objective manner. The Commission wishes to provide effective and meaningful opportunities for public participation in the review process.

Project Management and Initiation

Consultant will meet with LAFCO staff to ensure initial understanding of project scope and objectives, define roles, responsibilities, and lines of communication.

Work Plan

A. Process: At a minimum, preparation of the service review will include the following steps, although other activities may be necessary:

- Data collection and interviews with key city staff;
- Consultant's independent verification of submitted data;
- Analysis of data and preparation of preliminary findings;
- Presentation of preliminary findings to key agency and LAFCO staff;
- Preparation of an Administrative Review Draft Municipal Services Report to be circulated internally to the subject agency, affected agencies and LAFCO staff;
- Preparation of a Public Review Draft Municipal Service Review that includes agency comments and/or clarifications, as deemed appropriate by LAFCO staff;
- Publication and public release of the draft report; this will begin the public comment period;
- Preparation of final draft, including responses to comments and recommended determinations for each of the factors required for the MSR and a SOI review/update as identified in the *Scope of Services* and responses to comments;
- Presentation of final report to Commission at public hearing;
- Commission's adoption of report and determinations;

Research Questions

The Municipal Service Review must include data and analysis upon which the Commission's determinations on the items required by Sections 56425 and 56430 of the Government Code can be based. Hence, the MSR shall address at a minimum the following research questions for each of the four cities:

- What municipal services are currently provided by the Cities of La Mirada and Whittier?
- How much population growth is anticipated within each of the cities and sphere of influence over the next 5, 10, 15 years?
- What is the anticipated increase in municipal service demand expected within each of the city limits and sphere of influence over the next 5, 10, 15 years?
- What is the current adequacy of service provided within the area of interest?
- To what extent are service providers able to meet anticipated growth in demand for water services in the area of interest?

- What are the present and planned land uses within the existing sphere of influence?
- What contiguous areas could potentially be included in the Cities of La Mirada and Whittier spheres of influence?
- What is the current capacity of public facilities and adequacy of public services that each of the cities is interested in providing?
- What opportunities exist for service providers in and near the area of interest to share public facilities to more effectively and efficiently deliver services?
- Do the service providers of interest have adequate public facilities and other infrastructure to accommodate anticipated growth in service demand in the area of interest?
- What cost avoidance opportunities, financing constraints and financing opportunities exist in providing municipal services to the area of interest?
- What alternative delivery options exist relevant to future water provisions to the areas of interest, and what are the advantages and disadvantages of consolidating or reorganizing service providers?
- To what extent are service providers in the area of interest accountable to the population being served?
- What governance structures currently exist among the service providers of interest?
- What is the consultant's evaluation of current and potential management efficiencies as they relate to optimal service provision and optimal spheres of influence?

Draft Municipal Service Review Report

The Draft Municipal Service Review Report will consist of the following:

- An analysis of the data collected and preparation of preliminary findings and presentation of those findings to key staff for review and comment.
- The report shall provide research, analysis, and recommendations for the relevant findings and determinations with respect to Government Code Sections 56425 and 56430.
- Circulation of Draft Municipal Service Review.

Staff Report

March 13, 2019

Agenda Item No. 9.c.

FY 2018-19 Mid-Year Budget Status Report
(Continued from 2/13/19 Meeting)

Summary: In accordance with Government Code Section 56381, the Commission adopted a budget for FY 2018-19 in May of 2018, prior to the statutory requirement of June 15th. Since the budget's adoption, County Counsel support has increased and the website redesign project has been carried into the current fiscal, resulting in greater than anticipated expenditures.

This budget status report incorporates recent expenditure changes and provides an overview of the projected year-end position in comparison to the adopted budget. Revenues are expected to be slightly above target, and Operating Expenditures are expected to be slightly higher by approximately 4.5%.

Provided herein is a brief description of the budget categories identifying significant variations from the adopted budget.

Expenditures:

Salaries and Employee Benefits: *The Salaries and Employee Benefits are expected to be below budget by 3% as described in more detail below.*

Employee Salaries (50001): Cost savings were achieved due to a reduction in administrative support.

Retirement (50015): As a LACERA participatory agency, LAFCO is subject to employer contribution rates increases. In October of 2017, employer contribution rates were increased by less than 1% in accordance with LACERA's June 30, 2017 valuation report. Also included is an estimated administrative fee quoted by LACERA for managing existing retirees' health benefits.

Health Insurance (50019): Health insurance costs for employee medical and dental benefits are expected to be slightly lower than initially anticipated. This is primarily due to health benefits and premium rates remaining relatively constant.

OPEB—Existing Retiree (50022): This account reflects existing LAFCO retirees' post-employment benefits. The portion of employment benefits paid by LAFCO did not change as initially anticipated during the budget preparation process. This will result in cost savings of approximately $3,500.

Office Expenses: *Although a few Office Expenses categories are projected to be greater than budgeted, cost saving were achieved in others, causing Office Expenses projections to be slightly above budgeted levels by 0.60%.*

Rent (50025): The office space lease allows for an annual 3% rent increase escalator. The lease also calls for LAFCO to pay its proportionate share of common area maintenance (CAM). As of the writing of this staff report, the estimated 2019 operating expenses had not been calculated for the common areas. A slight 5% CAM increase is being used as a placeholder for projected year end, increasing rent expenditures by a negligible amount.

Communications (50026): Costs associated with internet, phone and mobile devices are expected to be lower than at budget preparation.

Property/Liability Insurance (50032): Cost savings in property/liability insurance services were achieved by reevaluating coverage and coverage limits.

Agency Membership Dues (50033): Membership dues were slightly higher than budgeted.

Legal Notices (50052)/ Postage (50054)/ Printing/Copy Charges (50056): Increases in these accounts are related to the legal notification for the Commission-initiated dissolution of the Sativa County Water District. In addition to publishing the public hearing notice in the newspaper of general circulation, the notice was published in a local newspaper and a Spanish language newspaper, to provide notice to the affected constituents. Approximately, 6,200 notices were printed, copied, and mailed.

Miscellaneous – Other (50065): Generally nominal routine and miscellaneous unexpected inconsequential expenses are posted to this account. During this fiscal year an unexpected one-time expense for necessary office improvements was incurred, causing projected year end expenditures in this account to be over budget.

Professional Services: *Professional Services are also expected to be over budget. This is largely due to increased costs for County Counsel services and the deferral of the website redesign project to the current fiscal year.*

Legal Services (50076): LAFCO has utilized County Counsel services more frequently this fiscal year than initially anticipated. Counsel has provided support for the Commission initiated dissolution of the Sativa County Water District as well as a couple of controversial annexation proposals. In addition, due to the departure of counsel assigned to LAFCO, new counsel has had to manage the recent legal challenges faced by LAFCO. The mid-year budget status table includes expenses incurred by LAFCO for legal services through 33% of the fiscal year and over budget by approximately 3%. The year-end projection for legal services is estimated to be more than double the budgeted amount at approximately $137,000.

Payroll Service (50077.1): LAFCO uses an outside vendor for payroll services. Charges to this account are for inputting time, processing payroll and generating checks.

Contract Services (50078): During the 2017-18 fiscal year, the LAFCO website was compromised. Under the Commission's direction to eliminate the website's vulnerability to cybercrime, a $15,000 placeholder was added to the FY 2017-18 budget for a website upgrade. Since that time a Request for Proposals (RFP) was issued, a firm was selected, and a contract was executed. Currently, $18,000 is being included in this account to fund the website upgrade contract recently approved by the Commission (Nov. 14, 2018 Agenda; Item 9.b.).

Municipal Service Reviews (MSR): The most recent MSR schedule presented to the Commission in December of 2018 calls for five MSRs that would require outside consultant services. A placeholder of $50,000 has been allocated for those services.

Expenditure Summary:

In summary, it is anticipated that total expenditures will be approximately 4.5% above total budgeted expenditures of $1,472,400. The apportionment to the local agencies of Los Angeles County may very likely need to be increased in subsequent fiscal years as expenditures (pension, employee medical insurance, retiree health, legal services) beyond the Commission's control continue to increase.

Revenues:

At mid-year, fee revenues are generally on track and interest revenue is at budget. At the close of the fiscal year revenues are expected to exceed budgeted revenues by nearly 8.5%.

Local Agency Apportionment:

The local agency apportionments have been maintained at FY 2016-17 levels for the last three fiscal years. The Auditor Controller's Office has reported that most agencies have paid their apportionment. It is expected that by the end of the fiscal year all agencies would have paid their apportionment.

Recommended Action:

1. Receive and file the mid-year budget status report for Fiscal Year 2018-19.

	FISCAL YEAR 2018-19 MID YEAR BUDGET					
ACCT. #	ACCOUNT NAME	ADOPTED FINAL BUDGET 2018-19	MID YEAR BUDGET STATUS 2018-19	PROJECTED YEAR END (PYE) 2018-19	PYE $ Variance From Adopted	PYE % Variance From Adopted
	EXPENSES					
50000	**Salaries and Employee Benefits**					
50001	Employee Salaries	$ 639,600	$ 313,080	$ 626,159	-13,441	-2.10%
50015	Employer Paid Pension Contribution	116,200	59,124	118,032	1,832	1.71%
50016	Accrued vacation and sick cashout	10,000	4,700	10,000	0	0.00%
50017	Commissioner Stipends	20,000	8,100	20,000	0	0.00%
50018	Worker's Compensation Insurance	11,800	8,735	8,735	-3,065	-27.36%
50019	Insurance (Health, Disability, Life)	126,000	109,090	111,888	-14,112	-7.98%
50020	Payroll Taxes	9,300	5,189	10,377	1,077	10.07%
50022	OPEB - Existing Retirees	23,364	9,768	19,842	-3,522	-9.78%
New	LACERA OPEB Administratrion Costs	20,000	-	20,000	0	0.00%
	Total Salaries & Employee Benefits	$ 976,264	$ 517,784	$ 945,033	-31,231	-3.20%
50000A	**Office Expense**					
50025	Rent	$ 101,600	$ 50,677	$ 102,285	685	0.67%
50026	Communications	11,500	4,919	10,000	-1,500	-13.04%
50027	Supplies	7,400	3,587	7,400	0	0.00%
50029	Computer Software	5,935	4,378	5,935	0	0.00%
50030	Equipment lease	6,100	3,577	6,257	157	2.57%
50031	Employee & Guest Parking Fees	8,781	4,329	8,514	-267	-3.04%
50032	Property/Liability Insurance	27,000	20,058	21,258	-5,742	-21.27%
50033	Agency Membership Dues	11,400	13,236	13,236	1,836	16.10%
50040	Information Technology/Programming	6,600	3,387	6,600	0	0.00%
50052	Legal Notices	4,000	3,482	5,000	1,000	25.00%
50054	Postage	4,000	1,636	7,586	3,586	89.65%
50056	Printing/Copy Charges	4,000	1,788	5,400	1,400	35.01%
50057	Conferences/Travel - Commissioners	13,000	8,626	13,000	0	0.00%
50058	Conference/Travel - Staff	13,000	7,012	13,000	0	0.00%
50060	Auto Reimbursement	6,720	3,354	6,720	0	0.00%
50061	Various Vendors	7,200	3,745	7,491	291	4.04%
50065	Miscellaneous - Other	4,000	13,545	13,545	9,545	238.62%
50067	Computer-Copier-Misc Equipment	500	-	500	0	0.00%
	Total Office Expenses	$ 242,736	$ 151,337	$ 253,726	10,991	4.53%

	FISCAL YEAR 2018-19 MID YEAR BUDGET					
ACCT. #	ACCOUNT NAME	ADOPTED FINAL BUDGET 2018-19	MID YEAR BUDGET STATUS 2018-19	PROJECTED YEAR END (PYE) 2018-19	PYE $ Variance From Adopted	PYE % Variance From Adopted
50000C	**Professional Services**					
50076	Legal services	$ 65,000	$ 66,901	$ 136,901	71,901	110.62%
50077	Accounting & Bookkeeping	25,000	15,378	25,000	0	0.00%
50077.2	Audit/Financial Statements	7,400	6,500	6,500	-900	-12.16%
50077.1	Payroll Service	3,000	2,315	4,385	1,385	46.17%
50078	Contract Services	3,000	-	18,000	15,000	500.00%
50081	Municipal Service Reviews	50,000	-	50,000	0	0.00%
	Total Professional Services	$ 153,400	$ 91,094	$ 240,786	87,386	56.97%
	TOTAL EXPENDITURES	$ 1,372,400	$ 760,215	$ 1,439,546	67,146	5%
20020	**OPEB Liability - Reserves**	100,000	-	100,000		
	Total Contingencies and Reserves Set Aside	$ 100,000	$ -	$ 100,000	0	0%
	Total Appropriations	$ 1,472,400	$ 760,215	$ 1,539,546	67,146	4.56%
40000	**REVENUES**					
40005	Filing Fees	$ 85,500	$ 43,540	$ 85,500	0	0.00%
40006	Processing Fees	-	-	-	0	
40007	Interest Income	12,000	12,508	22,000	10,000	83.33%
40008	Other Income	350	40	350	0	0.00%
	Total Revenues	$ 97,850	$ 56,088	$ 107,850	10,000	8.49%
	NET OPERATING COSTS	$ 1,374,550	$ 704,127	$ 1,431,696	57,146	4.16%
	Local Agency Apportionment					
40001	City of Los Angeles	$ 203,456	$ 203,456	$ 203,456	0	0.00%
40002	County of Los Angeles	508,633	508,633	508,633	0	0.00%
40003	Other Cities (87)	305,177	299,955	305,177	0	0.00%
40004	Special Districts	305,177	304,740	305,177	0	0.00%
	Total Local Agency Apportionment	$ 1,322,443	$ 1,316,784	$ 1,322,443	0	0%

Staff Report

March 13, 2019

Agenda Item No. 9.d.

Alternate Public Member
(Continued from 2/13/19 Meeting)

Government Code Section 56326(f) of the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (the "Act") requires LAFCO to have a public member. The current Public Member is Gerard McCallum, currently serving a four-year term that will expire in May of 2019.

Government Code Section 56326(f) also states that the "other members of the commission may also appoint one alternate" public member [emphasis added]. The Alternate Public Member may serve and vote in place of the regular Public Member when that member is absent or disqualifies himself or herself from participating in a Commission meeting.

Until recently, the Alternate Public Member was Greig Smith, who was serving a four-year term that would expire in May of 2020. On Tuesday, January 15, 2019, Mr. Smith began service on the Los Angeles City Council. Mr. Smith was appointed to temporarily fill the 12th District seat vacated by Mitch Englander.

Government Code Section 56331 prohibits "an officer or employee of the county or any city or district with territory in the county" from serving as a public member or alternate public member.

Upon becoming the Acting City Councilman for the City's 12th District, Mr. Smith became an "officer or employee" of the City of Los Angeles and became ineligible to serve as the Alternate Public Member of the Commission. Mr. Smith will remain on the City Council until a new council person is elected at a special election to be held in June (with the possibility of an August run-off election).

LAFCO's website now identifies the Alternate Public Member position as "vacant."

Mid-term vacancies in the membership are usually filled for the unexpired term by appointment by the body that originally appointed that member whose office has become vacant, however, since the appointment of an Alternate Public Member is optional, the Commission can initiate a process to fill the vacancy or leave it vacant.

The Act does not set forth a process for the Los Angeles LAFCO to follow in appointing its Alternate Public Member. Although not applicable to the Los Angeles LAFCO, Government Code Section 56325 provides an example of the process some other LAFCOs are required to follow in selecting an alternate public member. Pursuant to Government Code Section 56325, when a vacancy occurs, commissions subject to section 56325 are required to post a notice of vacancy at or near the doors of the commission's meeting room or upon any official bulletin

board used for the purpose of posting the commission's public notices for at least 21 days before making the final appointment. A copy of the notice must be sent to the clerk or secretary of the legislative body of each local agency within the county served by the commission.

LAFCO has followed a similar process, with additional outreach, for its recent Alternate Public Member appointments.

Recommended Action:

1. Staff recommends that the Commission provide direction to staff with regard to this vacancy.

Staff Report

March 13, 2019

Agenda Item No. 10.a.

Legislative Update
(Continued from 2/13/19 Meeting)

This brief report reflects the fact that few bills have been introduced, as the Legislature reconvened recently (January 7, 2019). The California Association of Local Agency Formation Commissions ("CALAFCO") Legislative Committee (on which Executive Officer, Paul Novak serves) is working on the following bill (yet to be introduced):

Several bills were introduced in late February, prior to the deadline to introduce bills (February 22, 2019). Staff is tracking the following legislation:

- **AB 213 (Reyes):** Sponsored by the League of California Cities, this bill would reinstate the Educational Revenue Augment Funds ("ERAF") for city annexations of inhabited territory. Last year's version of the bill, also by Assemblyman Reyes, died in the Assembly Appropriations Committee. The bill was introduced on February 4, 2019, and referred to the Assembly Local Government Committee. CALAFCO has taken a "support" position; the Commission did not take a position on last year's bill.

  Commission Position: Staff recommends the Commission take a SUPPORT Position on AB 213.

- **AB 1253 (Rivas, Robert):** This bill would require the Strategic Growth Council, until July 31, 2025, to establish and administer a local agency formation commissions grant program for the payment of costs associated with initiating and completing the dissolution of districts listed as inactive, the payment of costs associated with a study of the services provided within a county by a public agency to a disadvantaged community, as defined, and for other specified purposes, including the initiation of an action, as defined, that is limited to service providers serving a disadvantaged community and is based on determinations found in the study, as approved by the commission. The bill would specify application submission, reimbursement, and reporting requirements for a local agency formation commission to receive grants pursuant to the bill. The bill would make the grant program subject to an appropriation for the program in the annual Budget Act, and would repeal these provisions on January 1, 2026. This is a CALAFCO sponsored bill following up on the recommendation of the Little Hoover Commission report of 2017 for the Legislature to provide LAFCOs with one-time grant funding for in-depth studies of potential reorganization of local service providers. Last year, the Governor vetoed AB 2258 - this is the same bill. The bill was introduced on February 22, 2019. CALAFCO has taken a "support" position; the Commission took a "Support" position on last year's bill.

  Commission Position: Staff recommends the Commission take a SUPPORT Position on AB 1253.

- **2019 Omnibus Bill (Assembly Local Government Committee):** The CALAFCO Legislative Committee is recommending nine (9) items for the Assembly Local

Government Committee's annual Omnibus Bill amending the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (each item is summarized on the "2019 Omnibus Bill Items Tracking Log," attached). ALGC staff rejected one item, a separate item was removed and added to a different bill and seven items remain in the draft Omnibus Bill.
LA LAFCO has taken a "support" position on prior Omnibus Bills; staff anticipates seeking a "support" position once the bill is formally introduced.

Commission Position: None Requested at this time.

- **SB 414 (Caballero):** This bill would create the Small System Water Authority Act of 2019, authorizing the creation of small system water authorities that will have powers to absorb, improve, and competently operate non-compliant public water systems. The bill, no later than March 1, 2020, would require the state board to provide written notice to cure to all public agencies, private water companies, or mutual water companies that operate a public water system that has either less than 3,000 service connections or that serves less than 10,000 people, and are not in compliance, for the period from July 1, 2018, through December 31, 2019, with one or more state or federal primary drinking water standard maximum contaminant levels. This bill is very similar to AB 2050 (Caballero) from 2018, and it is by the Eastern Municipal Water District (located in Riverside County) and the California Municipal Utilities Association. The intent is to give the State Water Resources Control Board (SWRCB) authority to mandate the dissolution of existing drinking water systems (public, mutual, and private) and authorize the formation of a new public water authority. The focus is on non-contiguous systems. While the SWRCB has existing authority to mandate consolidation of these systems, SB 414 would add the authority to mandate dissolution and the formation of a new public agency. LAFCO would be responsible for dissolving any state-mandated public agency dissolution, and the formation of the new water authority. The SWRCB's appointed administrator would act as the applicant on behalf of the state. LAFCO would have ability to approve with modifications the application, and the new agency would have to report to the LAFCO annually for the first 3 years. The bill was introduced on February 21, 2019. CALAFCO has taken a "Watch" position; the bill was only recently introduced, and staff is still analyzing the language and assessing its potential impacts.

Commission Position: None Requested at this time.

- **SB 646 (Morrell):** This bill would prohibit a city or district providing the extended service from denying the extension of a utility service to a property owner located within the extended service area based upon a property owner's election not to participate in an annexation or pre-annexation proceeding. The bill was introduced on February 22, 2019. CALAFCO has taken a "Watch" position; the bill was only recently introduced, and staff is still analyzing the language and assessing its potential impacts.

Commission Position: None Requested at this time.

- **AB 1389 (Eggman):** This bill would authorize the Commission to propose, as part of the review and approval of a proposal for the establishment of new or different functions or class of services, or the divestiture of the power to provide particular functions or class of services, within all or part of the jurisdictional boundaries of a special district, that the special district, to mitigate any loss of property taxes, franchise fees, and other revenues to any other affected local agency, provide payments to the affected local agency from the revenue derived from the proposed exercise of new or different functions or classes of service. The bill was introduced on February 22, 2019. CALAFCO has taken a "Watch" position; the bill was only recently introduced, and staff is still analyzing the language and assessing its potential impacts.

Commission Position: None Requested at this time.

Staff Recommendation:

1. Take "support" positions on AB 213 and AB 1253, and direct staff to communicate the positions in letters to members of the State Legislature and the Governor; and

2. Receive and Receive and file the Legislative Update.

Enclosures: AB 213 (Reyes)
AB 2153 (Rivas, Robert)

2019 Omnibus Bill Items Tracking Log					
Item No.	**Person Responsible**	**Section/Change**	**Actions**	**Due Date**	**Status**
1	Paul Novak	Add §56056.5 – add definition of Municipal Service Review			Approved as amended at the 12/14/18 leg mtg. Sent to ALGC 1/23/19. ALGC send to William Weber for comment 2/21.
2	Kai Luoma	§56074 – change definition of "service"			Approved as amended at the 12/14/18 leg mtg. Sent to ALGC 1/20/19. ALGC send to William Weber for comment 2/21.
3	Carole Cooper	§56133(c) – Delete "If consistent with adopted policy" in first sentence.	CALAFCO to watch AB 530 for inclusion.		Approved at the 12/14/18 leg mtg. Sent to ALGC 1/28/19 (no concerns received from EOs). ALGC approved and is pulling from Omnibus to include in AB 530 to avoid chaptering out issues.
4	Keene Simonds et al	§56133(e) – add "as determined by the commission" to the latter part of the sentence.	CALAFCO to send to CSDA, League, CSAC and ACWA for feedback.	CALAFCO to send out 2/21 with March 1 deadline for feedback.	Approved at the 12/14/18 leg mtg. Sent to ALGC 1/28/19 (no concerns received from EOs). ALGC wants CALAFCO to receive feedback from CSDA, League, CSAC and ACWA before submitting to full stakeholder review group. They are concerned about potential pushback and asked CALAFCO to be proactive in stakeholder outreach.
5	Paul Novak	§56325-56331.3, 56332, and 56335 (amend) and 56331.4 (new) Appointment of commissioners	Paul to revise proposal to amend only the Santa Clara and LA sections (56327(d) and 56325(d)(4)).	Paul to provide to CALAFCO by March 1	Approved at the 12/14/18 leg mtg. Sent to ALGC 1/20/19. ALGC did not approve as submitted.
6	Kai Luoma	§56375.3 – delete entire section (now outdated)			Approved at the 12/14/18 leg mtg. Sent to ALGC 1/20/19. ALGC send to William Weber for comment 2/21.

Last updated 2/21/2019 12:51 PM

7	Carole Cooper	§56663 – add "subsequent to commission approval" to clarify order of process			Approved at the 12/14/18 leg mtg. Sent to ALGC 1/20/19. ALGC send to William Weber for comment 2/21.
8	Carole Cooper	§57077 – add "consolidation of two or more cities"			Approved at the 12/14/18 leg mtg. Sent to ALGC 1/20/19. ALGC send to William Weber for comment 2/21.
9	Lou Ann Texeira	§57103 – add "unless it meets the provisions contained in Section 57077.1(c)" to the end of the section.			Approved at the 12/14/18 leg mtg. Sent to ALGC 1/20/19. ALGC send to William Weber for comment 2/21.

ASSEMBLY BILL No. 213

Introduced by Assembly Member Reyes
(Principal coauthors: Assembly Members Chu, Obernolte, Rodriguez, and Waldron)

January 15, 2019

An act to amend Section 97.70 of the Revenue and Taxation Code, relating to local government finance.

LEGISLATIVE COUNSEL'S DIGEST

AB 213, as introduced, Reyes. Local government finance: property tax revenue allocations: vehicle license fee adjustments.

Existing property tax law requires the county auditor, in each fiscal year, to allocate property tax revenue to local jurisdictions in accordance with specified formulas and procedures, and generally provides that each jurisdiction be allocated an amount equal to the total of the amount of revenue allocated to that jurisdiction in the prior fiscal year, subject to certain modifications, and that jurisdiction's portion of the annual tax increment, as defined.

Existing property tax law also requires that, for purposes of determining property tax revenue allocations in each county for the 1992–93 and 1993–94 fiscal years, the amounts of property tax revenue deemed allocated in the prior fiscal year to the county, cities, and special districts be reduced in accordance with certain formulas. It requires that the revenues not allocated to the county, cities, and special districts as a result of these reductions be transferred to the Educational Revenue Augmentation Fund in that county for allocation to school districts, community college districts, and the county office of education.

Beginning with the 2004–05 fiscal year and for each fiscal year thereafter, existing law requires that each city, county, and city and county receive additional property tax revenues in the form of a vehicle license fee adjustment amount, as defined, from a Vehicle License Fee Property Tax Compensation Fund that exists in each county treasury. Existing law requires that these additional allocations be funded from ad valorem property tax revenues otherwise required to be allocated to educational entities. Existing law, for the 2006–07 fiscal year, and for each fiscal year thereafter, requires the vehicle license fee adjustment amount to be the sum of the vehicle license fee adjustment amount for the prior fiscal year, if specified provisions did not apply, and the product of that sum and the percentage change from the prior fiscal year in the gross taxable valuation within the jurisdiction of the entity. Existing law establishes a separate vehicle license fee adjustment amount for a city that was incorporated after January 1, 2004, or on or before January 1, 2012.

This bill, for the 2019–20 fiscal year, would instead require the vehicle license fee adjustment amount to be the sum of the vehicle license fee adjustment amount in the 2018–19 fiscal year, the product of that sum and the percentage change in gross taxable assessed valuation within the jurisdiction of that entity between the 2018–19 fiscal year to the 2018–19 fiscal year, and the product of the amount of specified motor vehicle license fee revenues that the Controller allocated to the applicable city in July 2010 and 1.17. This bill, for the 2020–21 fiscal year, and for each fiscal year thereafter, would require the vehicle license fee adjustment amount to be the sum of the vehicle license fee adjustment amount for the prior fiscal year and the product of the amount as so described and the percentage change from the prior fiscal year in gross taxable assessed valuation within the jurisdiction of the entity.

By imposing additional duties upon local tax officials with respect to the allocation of ad valorem property tax revenues, this bill would impose a state-mandated local program.

The California Constitution requires the state to reimburse local agencies and school districts for certain costs mandated by the state. Statutory provisions establish procedures for making that reimbursement.

This bill would provide that, if the Commission on State Mandates determines that the bill contains costs mandated by the state, reimbursement for those costs shall be made pursuant to the statutory provisions noted above.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: yes.

The people of the State of California do enact as follows:

SECTION 1. Section 97.70 of the Revenue and Taxation Code is amended to read:

97.70. Notwithstanding any other law, for the 2004–05 fiscal year and for each fiscal year thereafter, all of the following apply:

(a) (1) (A) The auditor shall reduce the total amount of ad valorem property tax revenue that is otherwise required to be allocated to a county's Educational Revenue Augmentation Fund by the countywide vehicle license fee adjustment amount.

(B) If, for the fiscal year, after complying with Section 97.68 there is not enough ad valorem property tax revenue that is otherwise required to be allocated to a county Educational Revenue Augmentation Fund for the auditor to complete the allocation reduction required by subparagraph (A), the auditor shall additionally reduce the total amount of ad valorem property tax revenue that is otherwise required to be allocated to all school districts and community college districts in the county for that fiscal year by an amount equal to the difference between the countywide vehicle license fee adjustment amount and the amount of ad valorem property tax revenue that is otherwise required to be allocated to the county Educational Revenue Augmentation Fund for that fiscal year. This reduction for each school district and community college district in the county shall be the percentage share of the total reduction that is equal to the proportion that the total amount of ad valorem property tax revenue that is otherwise required to be allocated to the school district or community college district bears to the total amount of ad valorem property tax revenue that is otherwise required to be allocated to all school districts and community college districts in a county. For purposes of this subparagraph, "school districts" and "community college districts" do not include any districts that are excess tax school entities, as defined in Section 95.

(2) The countywide vehicle license fee adjustment amount shall be allocated to the Vehicle License Fee Property Tax Compensation Fund that shall be established in the treasury of each county.

(b) (1) The auditor shall allocate moneys in the Vehicle License Fee Property Tax Compensation Fund according to the following:

(A) Each city in the county shall receive its vehicle license fee adjustment amount.

(B) Each county and city and county shall receive its vehicle license fee adjustment amount.

(2) The auditor shall allocate one-half of the amount specified in paragraph (1) on or before January 31 of each fiscal year, and the other one-half on or before May 31 of each fiscal year.

(c) For purposes of this section, all of the following apply:

(1) "Vehicle license fee adjustment amount" for a particular city, county, or a city and county means, subject to an adjustment under paragraph (2) and Section 97.71, all of the following:

(A) For the 2004–05 fiscal year, an amount equal to the difference between the following two amounts:

(i) The estimated total amount of revenue that would have been deposited to the credit of the Motor Vehicle License Fee Account in the Transportation Tax Fund, including any amounts that would have been certified to the Controller by the auditor of the County of Ventura under subdivision (j) of Section 98.02, as that section read on January 1, 2004, for distribution under the law as it read on January 1, 2004, to the county, city and county, or city for the 2004–05 fiscal year if the fee otherwise due under the Vehicle License Fee Law (Part 5 (commencing with Section 10701) of Division 2) was 2 percent of the market value of a vehicle, as specified in Sections 10752 and 10752.1 as those sections read on January 1, 2004.

(ii) The estimated total amount of revenue that is required to be distributed from the Motor Vehicle License Fee Account in the Transportation Tax Fund to the county, city and county, and each city in the county for the 2004–05 fiscal year under Section 11005, as that section read on the operative date of the act that amended this clause.

(B) (i) Subject to an adjustment under clause (ii), for the 2005–06 fiscal year, the sum of the following two amounts:

(I) The difference between the following two amounts:

(ia) The actual total amount of revenue that would have been deposited to the credit of the Motor Vehicle License Fee Account in the Transportation Tax Fund, including any amounts that would have been certified to the Controller by the auditor of the County

of Ventura under subdivision (j) of Section 98.02, as that section read on January 1, 2004, for distribution under the law as it read on January 1, 2004, to the county, city and county, or city for the 2004–05 fiscal year if the fee otherwise due under the Vehicle License Fee Law (Part 5 (commencing with Section 10701) of Division 2) was 2 percent of the market value of a vehicle, as specified in Sections 10752 and 10752.1 as those sections read on January 1, 2004.

(ib) The actual total amount of revenue that was distributed from the Motor Vehicle License Fee Account in the Transportation Tax Fund to the county, city and county, and each city in the county for the 2004–05 fiscal year under Section 11005, as that section read on the operative date of the act that amended this subsubclause.

(II) The product of the following two amounts:

(ia) The amount described in subclause (I).

(ib) The percentage change from the prior fiscal year to the current fiscal year in gross taxable assessed valuation within the jurisdiction of the entity, as reflected in the equalized assessment roll for those fiscal years. For the first fiscal year for which a change in a city's jurisdictional boundaries first applies, the percentage change in gross taxable assessed valuation from the prior fiscal year to the current fiscal year shall be calculated solely on the basis of the city's previous jurisdictional boundaries, without regard to the change in that city's jurisdictional boundaries. For each following fiscal year, the percentage change in gross taxable assessed valuation from the prior fiscal year to the current fiscal year shall be calculated on the basis of the city's current jurisdictional boundaries.

(ii) The amount described in clause (i) shall be adjusted as follows:

(I) If the amount described in subclause (I) of clause (i) for a particular city, county, or city and county is greater than the amount described in subparagraph (A) for that city, county, or city and county, the amount described in clause (i) shall be increased by an amount equal to this difference.

(II) If the amount described in subclause (I) of clause (i) for a particular city, county, or city and county is less than the amount described in subparagraph (A) for that city, county, or city and

county, the amount described in clause (i) shall be decreased by an amount equal to this difference.

(C) For the 2006–07 fiscal year and ~~for each~~ *until the 2018–19* fiscal ~~year thereafter,~~ *year, inclusive,* the sum of the following two amounts:

(i) The vehicle license fee adjustment amount for the prior fiscal year, if Section 97.71 and clause (ii) of subparagraph (B) did not apply for that fiscal year, for that city, county, and city and county.

(ii) The product of the following two amounts:

(I) The amount described in clause (i).

(II) The percentage change from the prior fiscal year to the current fiscal year in gross taxable assessed valuation within the jurisdiction of the entity, as reflected in the equalized assessment roll for those fiscal years. For the first fiscal year for which a change in a city's jurisdictional boundaries first applies, the percentage change in gross taxable assessed valuation from the prior fiscal year to the current fiscal year shall be calculated solely on the basis of the city's previous jurisdictional boundaries, without regard to the change in that city's jurisdictional boundaries. For each following fiscal year, the percentage change in gross taxable assessed valuation from the prior fiscal year to the current fiscal year shall be calculated on the basis of the city's current jurisdictional boundaries.

(D) For the 2019–20 fiscal year, the sum of the following three amounts:

(i) The vehicle license fee adjustment amount for the 2018–19 fiscal year.

(ii) The product of the following two amounts:

(I) The amount described in clause (i).

(II) The percentage change from the 2018–19 fiscal year to the 2019–20 fiscal year in gross taxable assessed valuation within the jurisdiction of the entity, as reflected in the equalized assessment roll for those fiscal years.

(iii) The product of the following two amounts:

(I) The amount that was allocated in July 2010 by the Controller to the city pursuant to subdivision (d) of Section 11005, as that section read on July 1, 2010.

(II) 1.17.

(E) For the 2020–21 fiscal year, and for each fiscal year thereafter, the sum of the following two amounts:

(i) The vehicle license fee adjustment amount for the prior fiscal year.

(ii) The product of the following two amounts:

(I) The vehicle license fee adjustment amount for the prior fiscal year.

(II) The percentage change from the prior fiscal year to the current fiscal year in gross taxable assessed valuation within the jurisdiction of the entity, as reflected in the equalized assessment role for those fiscal years.

(2) Notwithstanding paragraph (1), "vehicle license fee adjustment amount," for a city incorporating after January 1, 2004, and on or before January 1, 2012, means the following:

(A) For the 2017–18 fiscal year, the quotient derived from the following fraction:

(i) The numerator is the product of the following two amounts:

(I) The sum of the most recent vehicle license fee adjustment amounts determined for all cities in the county.

(II) The population of the incorporating city.

(ii) The denominator is the sum of the populations of all cities in the county.

(B) For the 2018–19 fiscal year, and for each fiscal year thereafter, the sum of the following two amounts:

(i) The vehicle license fee adjustment amount for the prior fiscal year.

(ii) The product of the following two amounts:

(I) The amount described in clause (i).

(II) The percentage change from the prior fiscal year to the current fiscal year in gross taxable assessed valuation within the jurisdiction of the entity, as reflected in the equalized assessment roll for those fiscal years.

(3) For the 2013–14 fiscal year, the vehicle license fee adjustment amount that is determined under subparagraph (C) of paragraph (1) for the County of Orange shall be increased by fifty-three million dollars ($53,000,000). For the 2014–15 fiscal year and each fiscal year thereafter, the calculation of the vehicle license fee adjustment amount for the County of Orange under ~~subparagraph (C)~~ *subparagraphs (C), (D), and (E)* of paragraph (1) shall be based on a prior fiscal year amount that reflects the full amount of this one-time increase of fifty-three million dollars ($53,000,000).

(4) "Countywide vehicle license fee adjustment amount" means, for any fiscal year, the total sum of the amounts described in paragraphs (1), (2), and (3) for a county or city and county, and each city in the county.

(5) On or before June 30 of each fiscal year, the auditor shall report to the Controller the vehicle license fee adjustment amount for the county and each city in the county for that fiscal year.

(d) For the 2005–06 fiscal year and each fiscal year thereafter, the amounts determined under subdivision (a) of Section 96.1, or any successor to that provision, shall not reflect, for a preceding fiscal year, any portion of any allocation required by this section.

(e) For purposes of Section 15 of Article XI of the California Constitution, the allocations from a Vehicle License Fee Property Tax Compensation Fund constitute successor taxes that are otherwise required to be allocated to counties and cities, and as successor taxes, the obligation to make those transfers as required by this section shall not be extinguished nor disregarded in any manner that adversely affects the security of, or the ability of, a county or city to pay the principal and interest on any debts or obligations that were funded or secured by that city's or county's allocated share of motor vehicle license fee revenues.

(f) This section shall not be construed to do any of the following:

(1) Reduce any allocations of excess, additional, or remaining funds that would otherwise have been allocated to county superintendents of schools, cities, counties, and cities and counties pursuant to clause (i) of subparagraph (B) of paragraph (4) of subdivision (d) of Sections 97.2 and 97.3 or Article 4 (commencing with Section 98) had this section not been enacted. The allocations required by this section shall be adjusted to comply with this paragraph.

(2) Require an increased ad valorem property tax revenue allocation or increased tax increment allocation to a community redevelopment agency.

(3) Alter the manner in which ad valorem property tax revenue growth from fiscal year to fiscal year is otherwise determined or allocated in a county.

(4) Reduce ad valorem property tax revenue allocations required under Article 4 (commencing with Section 98).

(g) Tax exchange or revenue sharing agreements, entered into prior to the operative date of this section, between local agencies

or between local agencies and nonlocal agencies are deemed to be modified to account for the reduced vehicle license fee revenues resulting from the act that added this section. These agreements are modified in that these reduced revenues are, in kind and in lieu thereof, replaced with ad valorem property tax revenue from a Vehicle License Fee Property Tax Compensation Fund or an Educational Revenue Augmentation Fund.

SEC. 2. If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

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ASSEMBLY BILL No. 1253

Introduced by Assembly Member Robert Rivas
(Coauthors: Senators Caballero and Hertzberg)

February 21, 2019

An act to add and repeal Section 75131 of the Public Resources Code, relating to local government.

LEGISLATIVE COUNSEL'S DIGEST

AB 1253, as introduced, Robert Rivas. Local agency formation commissions: grant program.

The Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 provides the exclusive authority and procedure for the initiation, conduct, and completion of changes of organization and reorganization for special districts, as specified. The act requires a local agency formation commission in each county to encourage the orderly formation and development of local agencies based upon local conditions and circumstances, among other things.

Existing law also establishes the Strategic Growth Council in state government and assigns to the council certain duties, including providing, funding, and distributing data and information to local governments and regional agencies that will assist in the development and planning of sustainable communities.

This bill would require the Strategic Growth Council, until July 31, 2025, to establish and administer a local agency formation commissions grant program for the payment of costs associated with initiating and completing the dissolution of districts listed as inactive, the payment of costs associated with a study of the services provided within a county by a public agency to a disadvantaged community, as defined, and for

other specified purposes, including the initiation of an action, as defined, that is limited to service providers serving a disadvantaged community and is based on determinations found in the study, as approved by the commission. The bill would specify application submission, reimbursement, and reporting requirements for a local agency formation commission to receive grants pursuant to the bill. The bill would require the council, after consulting with the California Association of Local Agency Formation Commissions, to develop and adopt guidelines, timelines, and application and reporting criteria for development and implementation of the program, as specified, and would exempt these guidelines, timelines, and criteria from the rulemaking provisions of the Administrative Procedure Act. The bill would make the grant program subject to an appropriation for the program in the annual Budget Act, and would repeal these provisions on January 1, 2026.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

SECTION 1. The Legislature hereby finds and declares:

(a) Local agency formation commissions play a critical role in the logical formation of local agency boundaries, the promotion of orderly development, and the efficient and effective provision of services.

(b) It is the intent of the Legislature in adding Section 75131 to the Public Resources Code to assist local agency formation commissions in initiating studies of existing government agencies and their provision of services and to consider action based on the results of these studies, including dissolving inactive districts, for the purpose of creating streamlined local government services and improved efficiency in service delivery.

SEC. 2. Section 75131 is added to the Public Resources Code, to read:

75131. (a) (1) The council shall establish and administer a local agency formation commissions grant program for the purposes described in subdivision (b), subject to an appropriation for this program in the annual Budget Act.

(2) Program funds provided to participating local agency formation commissions shall be used to supplement, and not supplant, existing funding and staffing levels.

(3) Program funds provided to participating local agency formation commissions shall not be used to conduct a service review of municipal services pursuant to Section 56430 of the Government Code.

(4) All local agency formation commissions shall be eligible to participate in the program.

(5) The council shall, after consulting with the California Association of Local Agency Formation Commissions (CALAFCO), adopt guidelines, timelines, and application and reporting criteria for development and implementation of the program to serve the purposes of this section and mutually meet the needs of the council and the CALAFCO.

(6) The council, in granting funds pursuant to the program, shall give preference to a local agency formation commission whose decisions are consistent with the goals of the sustainable communities strategy adopted pursuant to Section 65080 of the Government Code.

(b) The council shall award grants to local agency formation commissions for any of the following purposes:

(1) The payment of costs associated with initiating and completing the dissolution of a special district that is listed by the Controller as inactive pursuant to Section 56879 of the Government Code.

(2) The payment of costs associated with a study prepared pursuant to Section 56378 of the Government Code of the services provided within a county by a public agency to a disadvantaged community to do either or both of the following:

(A) Identify if there are any efficiencies to be gained in the provision of services.

(B) Determine what alternatives, if any, exist for improving efficiency and affordability of infrastructure and service delivery.

(3) The payment of costs to do any of the following:

(A) Initiate an action described in paragraph (2) of subdivision (a) of Section 56375, other than the dissolution of a special district that is listed by the Controller as inactive pursuant to Section 56879 of the Government Code, that is limited to service providers serving a disadvantaged community and is based on determinations found in a study prepared pursuant to Section 56378 of the Government Code, as approved by the commission.

(B) Develop and implement reorganization plans with timelines for expected outcomes.

(C) Incentivize service providers to work with the local agency formation commission to develop and implement reorganization plans with timelines for expected outcomes.

(c) (1) In order to obtain a grant award pursuant to paragraph (1) of subdivision (b), a local agency formation commission shall submit to the council an application for reimbursement of the costs of the dissolution proceedings, in the form and manner specified by the council. At a minimum, the application shall include all of the following:

(A) The notification provided to the commission by the Controller of the inactive district(s) and the requirement to initiate dissolution proceedings.

(B) A full budget accounting for costs of the dissolution.

(C) All reports and documents pertaining to the final dissolution action.

(2) The council shall review the application for reimbursement and, provided all documentation is in order, issue reimbursement to the local agency formation commission within 60 days of receipt of the application.

(d) (1) In order to obtain a grant award pursuant to paragraph (2) of subdivision (b) for purposes of conducting a study, a local agency formation commission shall submit to the council an application, in the form and manner specified by the council. At a minimum, the application shall include all of the following:

(A) A resolution adopted by the commission authorizing submission of the grant application and a commitment to review and consider the recommendations and potential actions contained in the study.

(B) A full budget accounting for estimated costs of the study to be performed.

(C) A full explanation of the reason for the study.

(D) The most recent completed municipal service review or study in which determinations were made by the local agency formation commission indicating the agency to be studied is a candidate for a change of organization or reorganization.

(E) An identification of the disadvantaged community that is expected to benefit from the study.

(2) The council shall review the applications submitted pursuant to paragraph (1), select the program participants based on criteria that furthers the purposes of this section, and notify the participants of their selection within two months of receiving the application. Funds shall be issued by the council to the local agency formation commission within 60 days of notification.

(3) A local agency formation commission that receives a grant pursuant to paragraph (2) of subdivision (b) shall commence the study within 30 days of receipt of funding and shall complete the study within two years of commencing the study. Upon completion of the study, the local agency formation commission shall do all of the following:

(A) Submit to the council a final report within 30 days of the completion of the study and the commission's adoption of a resolution making determinations. The report shall be in the form and manner specified by the council. At a minimum, the report shall include all of the following:

(i) The full study conducted.

(ii) The resolution making determinations as adopted by the local agency formation commission.

(iii) A full budget accounting report of the funds used.

(iv) A reimbursement of any unexpended funds.

(v) The local agency formation commission's plan for future action based on the study's conclusions.

(B) Upon the request of the council, participating local agency formation commissions shall provide the council with any supplemental information necessary to substantiate the information contained in the report submitted pursuant to this subdivision.

(4) A local agency formation commission shall repay the entire amount of the grant awarded pursuant to this subdivision to the council if the study funded pursuant to this subdivision is not completed within two years of receipt of the grant funds. The local agency formation commission shall make this repayment within 30 days from the two-year anniversary of receipt of the grant funds.

(e) (1) A local agency formation commission that elects to apply for a grant pursuant to paragraph (3) of subdivision (b) shall submit to the council an application, in the form and manner specified by the council. At a minimum, the application shall include all of the following:

(A) A resolution adopted by the commission authorizing submission of the application for purposes defined in the application.

(B) Change of organization or reorganization plans with timelines for expected outcomes.

(C) A full budget accounting for estimated costs of the action to be performed.

(D) The most recent completed study in which determinations were made by the local agency formation commission indicating the agency should be reorganized or dissolved, or, if there exists a municipal services review or study with like determinations that is no more than five years old.

(E) An identification of the disadvantaged community that is expected to benefit from the action.

(2) The council shall review the applications submitted pursuant to paragraph (3) of subdivision (b), select the program participants based on criteria that furthers the purposes of this section, and notify the participants of their selection within two months of receiving the application. Funds shall be issued by the council to the local agency formation commission within 60 days of notification.

(3) A local agency formation commission that receives funds pursuant to paragraph (3) of subdivision (b) shall commence action within 30 days of receipt of funding.

(4) A local agency formation commission that receives funds pursuant to paragraph (3) of subdivision (b) shall hold a public hearing to consider the action described in paragraph (2) of subdivision (a) of Section 56375, except the dissolution of a special district that is listed by the Controller as inactive pursuant to Section 56879 of the Government Code. If the action is approved by a local agency formation commission, that local agency formation commission shall order the change of organization or reorganization subject to Section 57075 of the Government Code, except that the level of protest necessary to require an election for confirmation by the registered voters residing within the affected territory shall be determined by the corresponding percentage of registered voters or land owners required to qualify a recall on the ballot pursuant to subdivision (a) or (d), as appropriate, of Section 11221 of the Elections Code. The calculation of registered voters shall be made pursuant to subdivision (b) of that section. Upon

completion of the change of organization or reorganization, the local agency formation commission that receives funds pursuant to paragraph (3) of subdivision (b) shall do both of the following:

(A) Submit to the council a final report within 30 days of the final action. The report shall be in the form and manner specified by the council. At a minimum, the report shall include all of the following:

(i) The final action taken by the local agency formation commission.

(ii) If proceedings were terminated as a result of protest, all necessary information pertinent to support that fact.

(iii) All reports and documents pertaining to the final action or protest action.

(iv) A full budget accounting report of the funds used.

(v) The reimbursement of any unexpended funds.

(B) Upon the request of the council, the participating local agency formation commission shall provide the council with any supplemental information necessary to substantiate the information contained in the report submitted pursuant to this subdivision.

(f) The Legislature finds and declares that there is a compelling public interest in allowing the council to implement and administer this section as expeditiously as possible, and to thereby accelerate local agency formation commission efforts. The guidelines, timelines, and application and reporting criteria adopted by the council for purposes of this section shall be exempt from the rulemaking provisions of the Administrative Procedure Act (Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code) for the purpose of carrying out the duties enumerated in this section.

(g) For the purposes of this section, the following terms shall apply:

(1) "Disadvantaged community" means a community with an annual median household income that is less than 80 percent of the statewide annual median household income.

(2) "Local agency formation commission" means a local agency formation commission that operates in a county pursuant to the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000 (Division 3 (commencing with Section 56000) of Title 5 of the Government Code).

(h) This section shall not be interpreted to effect the independence or discretion exercised by a local agency formation commission in carrying out an action pursuant to this section.

(i) This section shall become inoperative on July 31, 2025, and, as of January 1, 2026, is repealed.

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