

*Water Supply and Growth in California: A  
Survey of City and County Land-Use  
Planners*

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# Introduction

Finding water to support growth has become a key resource management challenge for many California communities. As it becomes more difficult and more costly to mobilize new supplies, cities and counties are under increasing pressure to identify water sources prior to the approval of new development projects. Often, this requires forging new linkages between water utilities and the city and county departments responsible for overseeing land-use decisions.

Since 1995, the state legislature has passed several bills requiring such linkages for large development projects, typically of more than 500 residential units (ACWA, 2002; California Department of Water Resources, 2003). In that year, Senate Bill (SB) 901 called for water supply assessments of projects during the environmental review of the specific plan or general plan amendment for specified projects. In 2001, SB 610 strengthened these review requirements, and SB 221 made written verification of long-term water supply a precondition of final subdivision map approval. These laws have been the source of much policy debate.<sup>1</sup> On the one hand, concerns have been raised that the review thresholds are too high – allowing many new projects to go through without scrutiny despite their potential impact on local water availability. On the other hand, some critics have argued that the review process may unfairly block new housing, because of imprecise standards on what constitutes an adequate supply.

Recent public discussions have placed less emphasis on the local policy context. While it is well known that certain coastal communities have long had strict policies linking water and housing,<sup>2</sup> much less is known about how local governments across the state deal with these questions. How involved are land-use authorities in water planning activities? How many local governments have their own procedures for reviewing the water resource implications of new development?

As part of a study on how California's communities are meeting the challenges of water supply for growth, the Public Policy Institute of California conducted a survey of city and county land-use planners throughout the state over a several-month period beginning in November 2003. The survey aimed to document the types of water planning tools available and to gauge the importance of local and state water adequacy policies in different types of communities. Respondents were asked to reply for the area over which they exercise planning jurisdiction – the city itself for city planning departments, and the unincorporated area of the county for county planners. By the end of February 2004, surveys were received from respondents in 274 cities and 35 counties, for a 58 percent response rate (Appendix A).

In this paper, we summarize the responses. Because much of the growth pressure in the state occurs within unincorporated areas (20 percent of all new housing between 1996 and 2002), we report some results separately for cities and counties. Because both water supply

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<sup>1</sup> For a discussion of the debates leading up to the passage of the 2001 laws, see ACWA (2002).

<sup>2</sup> Santa Barbara County's policies limiting new water meters during the 1970s and 1980s are described in Mercer and Morgan (1982) and Hundley (2001). Communities in Marin and Sonoma Counties were involved in court cases in the 1970s and early 1980s concerning the rights of utilities and municipalities to limit housing based on water supply (Biggs, 1990; Tarlock and Van de Wetering, 1999).

conditions and growth pressures differ across the state, we also consider some responses by seven broad regional categories (Table 1).

**Table 1  
Region Definitions**

| <b>Region</b>                | <b>Includes jurisdictions in these counties:</b>  |
|------------------------------|---|
| San Francisco Bay Area       | Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma   |
| San Joaquin Valley           | Fresno, Kern, Kings, Madera, Merced, San Joaquin, Stanislaus, Tulare  |
| Southern Coast               | Los Angeles, Orange, San Diego, Ventura   |
| Inland Empire                | Riverside, San Bernardino   |
| Sacramento Metropolitan Area | El Dorado, Placer, Sacramento, Yolo   |
| Central Coast                | Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz  |
| Rest of State                | Alpine, Amador, Butte, Calaveras, Colusa, Del Norte, Glenn, Humboldt, Imperial, Inyo, Lake, Lassen, Mariposa, Mendocino, Modoc, Mono, Nevada, Plumas, Shasta, Sierra, Siskiyou, Sutter, Tehama, Trinity, Tuolumne, Yuba |

Two coastal regions – the Southern California Coast and the San Francisco Bay Area – are the state’s historical metropolitan areas, which continue to exhibit considerable growth (Table 2). Both regions have a diversity of water sources from local, state, and federal projects, but recent and pending cutbacks – notably from the Colorado River – have put pressure on Southern California to identify additional sources. Although the San Francisco Bay Area has not experienced comparable cutbacks, some jurisdictions there are under similar pressures. Three inland regions – the Sacramento Metropolitan Area, the San Joaquin Valley, and the Inland Empire – have become the state’s most rapidly growing areas.<sup>3</sup> Some communities within the Sacramento region have a considerable margin for growth with existing water rights, but many jurisdictions there and in the other two regions are seeking new sources – including groundwater banking and transfers from agriculture. The Central Coast distinguishes itself by longstanding concerns over water supply issues. We have grouped rural counties with low populations and limited growth pressure into a seventh category.

<sup>3</sup> For a detailed discussion of recent and projected regional growth patterns, see Johnson (2002).



**Table 2**  
**Regional Population Growth and New Housing**

| <b>Region</b>          | <b>2003 Population</b> | <b>Average Annual<br/>Population Growth<br/>1990-2003 (%)</b> | <b>Total New<br/>Housing Units<br/>Constructed 1996-<br/>2002</b> |
|------------------------|------------------------|---|---|
| San Francisco Bay Area | 6,994,610              | 1.2   | 171,291   |
| San Joaquin Valley     | 3,518,225              | 2.0   | 121,004   |
| Southern Coast         | 16,711,365             | 1.2   | 293,972   |
| Inland Empire          | 3,538,675              | 2.6   | 144,949   |
| Sacramento Metro Area  | 1,932,625              | 2.2   | 104,618   |
| Central Coast          | 1,398,440              | 1.2   | 28,578  |
| Rest of State          | 1,497,565              | 1.3   | 44,348  |
| <b>California</b>      | <b>35,591,505</b>      | <b>1.4</b>  | <b>908,760</b>  |

Sources: Population: California Department of Finance, 2004. Residential construction permits 1996-2002: Construction Industry Research Board, 2004.



# Water Planning Tools

Land-use decisions – to subdivide lots, set zoning rules, and issue construction permits – fall under the jurisdiction of municipal and county governments. These decisions critically affect the level of community water demands. Meanwhile, the primary responsibility for water supply management falls with local water utilities. Utilities and general-purpose local governments are often distinct institutions, whose physical boundaries only partly overlap. Given the linkages between water demand and the housing stock, planning and legal scholars and practitioners have long considered the disjuncture in decisionmaking problematic and have argued for better linkages between land-use and water supply planning.

The survey asked a set of questions intended to gauge the relationship between land-use agencies and utilities. This included information on the institutions themselves (number and type of utilities serving a jurisdiction), the availability of planning documents assessing water demand, and the involvement of land-use agencies in water planning activities.

## Types of Water Utilities

Over half of the cities responding to the survey have a municipal water department, either alone (45 percent) or in conjunction with one or more public or private water suppliers (12 percent) (Table 3). Non-municipal suppliers serve the remaining 43 percent of cities. Across regions, cities in the San Joaquin Valley and the rural “rest of state” counties are more likely to have a city water department. However, city water departments are not disproportionately located in smaller cities; there is, in fact, a tendency for the reverse to be true.<sup>4</sup> We might expect the task of coordinating water and land-use activities to be easier when both entities are under one roof.

**Table 3**  
**Which water utilities serve residences in your city?**

|   | <b>Number of cities</b> | <b>Share of cities (%)</b> |
|---|-------------------------|----------------------------|
| City water department only                              | 122                     | 45                         |
| One non-city water utility                              | 76                      | 28                         |
| City water department and one or more other utilities   | 34                      | 12                         |
| More than one other utility (no city department)        | 41                      | 15                         |
| More than 3 utilities (with or without city department) | 11                      | 4                          |

Sample size = 274

<sup>4</sup> City size is significantly positively associated with the presence of a city water department, even when Los Angeles – which has its own department – is excluded from the sample.

We also might expect the land-use agency’s coordinating task to be facilitated in cases where there is a single utility serving the jurisdiction. Nearly three-quarters of all cities report having a sole supplier – municipal or otherwise – and only 4 percent have more than three utilities operating within their jurisdictions. By contrast, most county land-use agencies oversee areas with a large number of utilities: 31 out of 35 report more than three water suppliers, and over half report more than ten (and up to 180!), including numerous small mutual agencies and community service districts.

## Availability of Water Planning Documents

One of the basic building blocks for linking land-use and water decisions is information on how projected demographic growth will affect local water demand. Such information can be found in planning documents produced by water utilities as well as land-use planning documents such as general plans. The survey aimed to gauge the extent to which land-use planners were aware of such documents for their jurisdictions. Overall, seven out of ten planners responded in the affirmative (Table 4). Cities with municipal water departments were much more likely to report availability of water planning documents than other cities (86 versus 52 percent indicated at least one source). This higher response rate suggests that formal institutional linkages between water and land-use agencies may contribute to a greater level of information sharing.<sup>5</sup> Larger cities are also more likely to identify the availability of such documents.

**Table 4**  
**Are there any planning documents that assess future water demands for your city/county?**  
**If yes, which documents?**

|  | Cities with own<br>water department | Other<br>cities | Counties | All |
|--|-------------------------------------|-----------------|----------|-----|
| <i>Sample size:</i>                          | 156                                 | 118             | 35       | 309 |
| <i>Share (%) of jurisdictions reporting:</i> |                                     |                 |          |     |
| Both water and land-use agency documents     | 32                                  | 5               | 34       | 22  |
| Water agency documents only                  | 45                                  | 20              | 17       | 32  |
| Land-use agency documents only               | 9                                   | 26              | 17       | 17  |
| No sources reported                          | 14                                  | 48              | 31       | 29  |

Planning documents developed by the water utilities – including water master plans, urban water management plans, and other water resource studies – were the most prevalent sources cited. Overall, 54 percent of all jurisdictions mention them, either alone or in

<sup>5</sup> The survey cannot speak to whether such cities are also more likely to *have* water-planning documents covering their territory. However, other evidence suggests that the key difference may be higher land-use planner awareness of the plans in these cities. For the most recent round of urban water management plans, municipal utilities did not have a higher rate of compliance (as gauged by submission of a plan to the Department of Water Resources - DWR) than other utilities (authors’ calculations, using information on plan submission from DWR).

conjunction with land-use documents. Among water agency planning tools, water master plans are a more common source of information than urban water management plans (UWMPs) (Table 5). UWMPs are a state-mandated planning tool for large utilities (with at least 3,000 connections or supplying at least 3,000 acre-feet annually), whereas water master plans are a strictly local initiative. Predictably, UWMPs are mentioned more often by higher-population jurisdictions, whereas water master plans are used more broadly.

**Table 5**  
**Types of planning documents cited**

|                                 | Share (%) of jurisdictions |
|---------------------------------|----------------------------|
| General plan                    | 37                         |
| Water master plan               | 38                         |
| Urban water management plan     | 26                         |
| Other (specify)                 |                            |
| Other land-use agency documents | 2                          |
| Other water agency documents    | 7                          |

Sample size = 309

Land-use agency documents are nevertheless significant information sources on water demand, mentioned by 39 percent of all jurisdictions. The predominant tool is the general plan.<sup>6</sup> This finding is particularly noteworthy in light of recent proposals to incorporate a water element into the general plan process, because it suggests that many communities have begun to move in this direction.<sup>7</sup> There is a great deal of diversity in the location of water demand analysis within the plans. Elements mentioned included land-use, public or community facilities/services, conservation, open space, or natural resources, environment, housing, circulation, and capital improvements. Only one city (San Luis Obispo) and one county (Los Angeles) specifically mentioned a water and wastewater element.<sup>8</sup>

For jurisdictions indicating planning documents, the survey sought information on the planning horizon for the demand projections. Figure 1 presents these answers for those that

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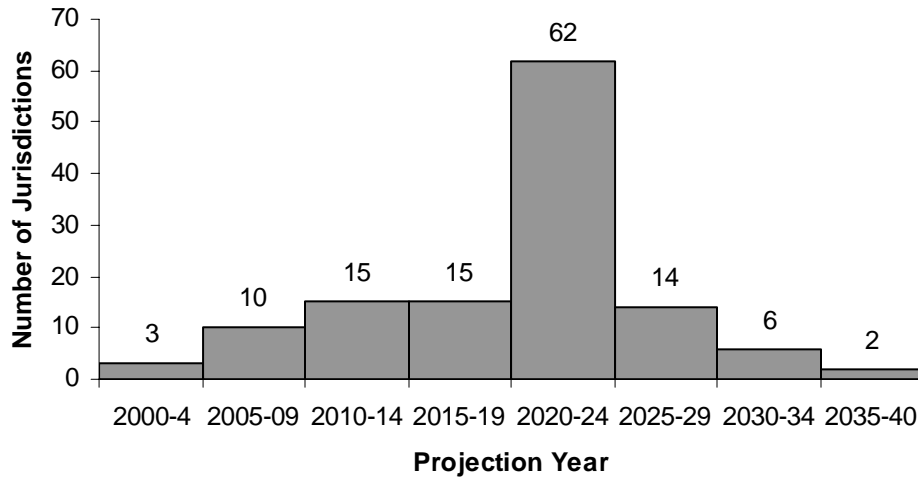
<sup>6</sup> Other land-use documents mentioned include several Local Agency Formation Commission (LAFCO) municipal service reviews and Environmental Impact Reports (EIR) for large-area development projects.

<sup>7</sup> The updated General Plan Guidelines issued by the Governor’s Office of Policy and Research in 2003 proposed an optional water element (Governor’s Office of Policy and Research, 2003a). In 2003, Assembly Bill 1015 proposed to make such an element mandatory.

<sup>8</sup> Just over one-third of those mentioning the general plan did not indicate which element dealt with water demand analysis.

responded, in five-year intervals.<sup>9</sup> Two-thirds reported projections to 2020 or beyond, the planning horizon for the current generation of UWMPs.<sup>10</sup> One-fifth are operating with projections that will expire within the next ten years.

**Figure 1**  
**To what year do water demand projections extend?**



Sample size = 127

Notes: In the case of a range of years, the latest year is shown.

## Participation in Water Planning Activities

A significant majority (62 percent) of city and county departments responsible for land-use planning also participate in the planning activities of their water utilities (Table 6). Again, having both functions under the same municipal roof appears to matter: Three-fourths of the cities with their own water department participate in utility planning, versus only half of the cities with other suppliers. City size also matters, with larger cities more likely to participate. For all agencies, the most common forms of participation are data sharing and review of documents prepared by the utility. Half of the cities with their own water departments reported direct participation in the analysis itself, double the rate of other cities. Other forms of participation mentioned include joint management or review of water development projects, joint governance (e.g., sitting on the utility board), and LAFCO service reviews.

<sup>9</sup> Roughly a third of the agencies provided no date. We have also excluded from these calculations the eight cities that indicated they had planning documents but were already “built-out.”

<sup>10</sup> The next round of UWMPs, due in 2005, should project supply and demand out to 2025.

**Table 6**  
**Does your department participate in the planning activities of the local water utilities, and if so, in what ways?**

|   | <b>Cities with own<br/>water department</b> | <b>Other cities</b> | <b>Counties</b> | <b>All</b> |
|---|---|---------------------|-----------------|------------|
| Participates                                    |   |                     |                 |            |
| Number  | 117   | 57                  | 17              | 191        |
| Share (%)                                       | 75  | 48                  | 49              | 62         |
| Methods (% of participating cities or counties) |   |                     |                 |            |
| Data sharing                                    | 80  | 75                  | 76              | 79         |
| Review of documents                             | 79  | 70                  | 88              | 77         |
| Joint analysis                                  | 49  | 26                  | 35              | 41         |
| Other (specify)                                 | 10  | 11                  | 24              | 12         |

Sample size = 309

The survey also asked whether the land-use agencies were participating in any wider groups working on water policy, such as countywide or regional exercises. Most county agencies and about half of all cities reported participation in one or more groups, with no significant difference between cities by utility type (Table 7). Activity is roughly evenly spread across groups dealing with groundwater, watershed, and floodplain management. Other groups include county or regional water agencies, clean water initiatives, and general water users' groups, such as the Sacramento Water Forum and countywide associations.

**Table 7**  
**Does your department participate in any wider groups working on water policy (e.g., countywide or regional exercises)?**

|                         | <b>Cities</b> | <b>Counties</b> | <b>All</b> |
|-------------------------|---------------|-----------------|------------|
| <i>Sample Size:</i>     | 274           | 35              | 309        |
| Share Participating (%) | 53            | 80              | 56         |
| Water Policy Groups (%) |               |                 |            |
| Groundwater Management  | 23            | 37              | 24         |
| Watershed               | 26            | 49              | 28         |
| Floodplain Management   | 20            | 20              | 20         |
| Other (specify)         | 19            | 29              | 20         |





# Local Water and Land-Use Policies

Whether land-use authorities are participating in water planning and policy activities is one indicator of linkages between water and land-use at the local level. Another indicator is whether these authorities take water resources into account when making decisions about land-use. On this point, the survey questions addressed both water supply and water quality considerations.

## Water Supply and Residential Construction

A majority of California’s local governments responding to the survey – 55 percent of all cities and four out of five counties – indicated that they have some form of local policy linking subdivision approval or residential construction-permitting to water supply conditions (Table 8).<sup>11</sup> Although the Central Coast appears to have a higher rate of local policies than elsewhere, this difference is not statistically significant. Unlike with planning, utility type does not appear to matter for whether cities have a water adequacy policy.

**Table 8**  
**Does your city/county have any local policies linking subdivision approval or residential construction-permitting to water supply?**

|                        | Number of jurisdictions | (%) |
|------------------------|-------------------------|-----|
| Cities                 | 151                     | 55  |
| Counties               | 29                      | 83  |
| San Francisco Bay Area | 32                      | 54  |
| San Joaquin Valley     | 18                      | 47  |
| Southern Coast         | 50                      | 56  |
| Inland Empire          | 13                      | 54  |
| Sacramento Metro Area  | 8                       | 57  |
| Central Coast          | 23                      | 77  |
| Rest of State          | 36                      | 67  |
| California             | 180                     | 58  |

Sample size = 309

Table 9 presents our categorization of respondents’ brief descriptions of these policies. The top half of the table indicates specific types of screening policies or mechanisms mentioned,

<sup>11</sup> An additional 11 cities and one county indicated that their local policy was to follow state law. In the tables presented here, we have counted these jurisdictions as not having a local policy.

alone or in combination, by about four-fifths of the respondents: utility oversight, adequate/available supply, conservation measures, and quantitative building caps. The bottom half of the table shows responses for the remaining fifth, for which the types of policies listed were more general, for instance, to “follow the general [specific] plan guidelines,” to “follow the local ordinance,” or to apply “ California Environmental Quality Act (CEQA) guidelines.”

**Table 9**  
**Types of local policies linking water supply and land-use**  
**(% of jurisdictions with local policies)**

|  | Number of<br>jurisdictions | (%) |
|--|----------------------------|-----|
| <b>Specific screening policies a/</b>                              |                            |     |
| Require adequate/available supply                                  | 83                         | 46  |
| Require utility oversight  |                            |     |
| - "will serve" letter  | 34                         | 19  |
| - utility review   | 32                         | 18  |
| Conservation measures  | 7                          | 4   |
| Caps on new building   | 8                          | 4   |
| <b>General policy only</b>   |                            |     |
| Follow general plan/specific plan/<br>master plan/local ordinances | 17                         | 9   |
| Apply CEQA review  | 4                          | 2   |
| Other/unspecified  | 8                          | 4   |

Sample size = 180

a/ 84 percent of sample, includes multiple answers

Nearly half of all jurisdictions indicated a requirement that water supply be “adequate” or “available” prior to subdivision or permit approval.<sup>12</sup> If we assume that most of the general policies noted above also entail some form of adequacy requirement, this brings the total to nearly two-thirds.

Over one-third of all jurisdictions require direct approval by the water utility – either through a “will-serve” letter or some other form of utility review of the proposed project.<sup>13</sup> This policy is much more prevalent for cities that do not have their own water department than for cities that do (60 percent versus 20 percent). When land-use and water supply functions are

<sup>12</sup> In several cases, “availability” was noted to be a function of sufficient infrastructure being in place, rather than a concern with water supply per se.

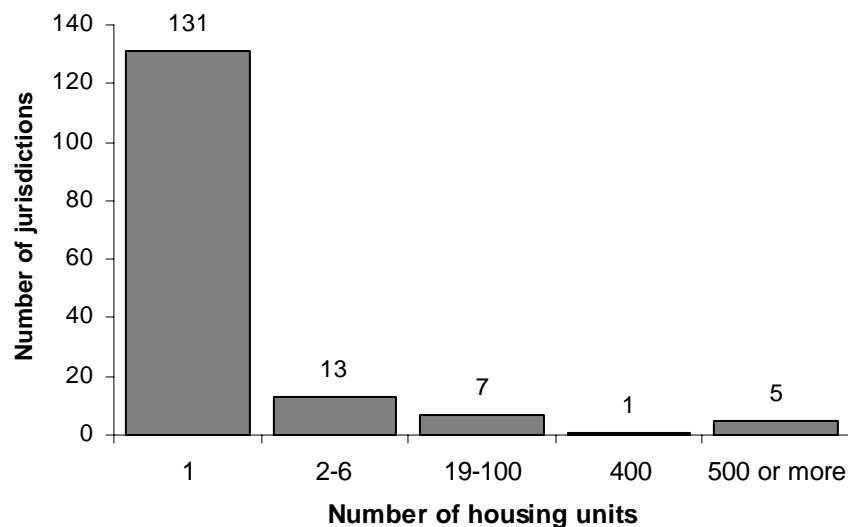
<sup>13</sup> There has been some debate over the effectiveness of a requiring a “will-serve” letter, since it does not imply anything specific about the quality of the utility’s own process for deciding whether water supplies are adequate for the new development.

under one roof, the utility review is more likely to be an implicit part of other policies listed, such as water adequacy requirements.

Only a handful of jurisdictions (4 percent) indicate specific conservation requirements for the approval of new development, such as retrofitting plumbing installations in existing structures to free up water supplies or engaging in desert landscaping on new lots. Outright quantitative caps on new construction because of water supply constraints are equally rare. Communities describing either measure are sprinkled across the state; only one county – Napa – has several cities reporting one or both types, to cope with limited supplies.

In the overwhelming majority of cases, local reviews are triggered for all new housing units (Figure 2). Only five jurisdictions list a review threshold as high as the main trigger under state law of 500 or more units.

**Figure 2**  
**Size thresholds for review under local policies**



Sample size = 157

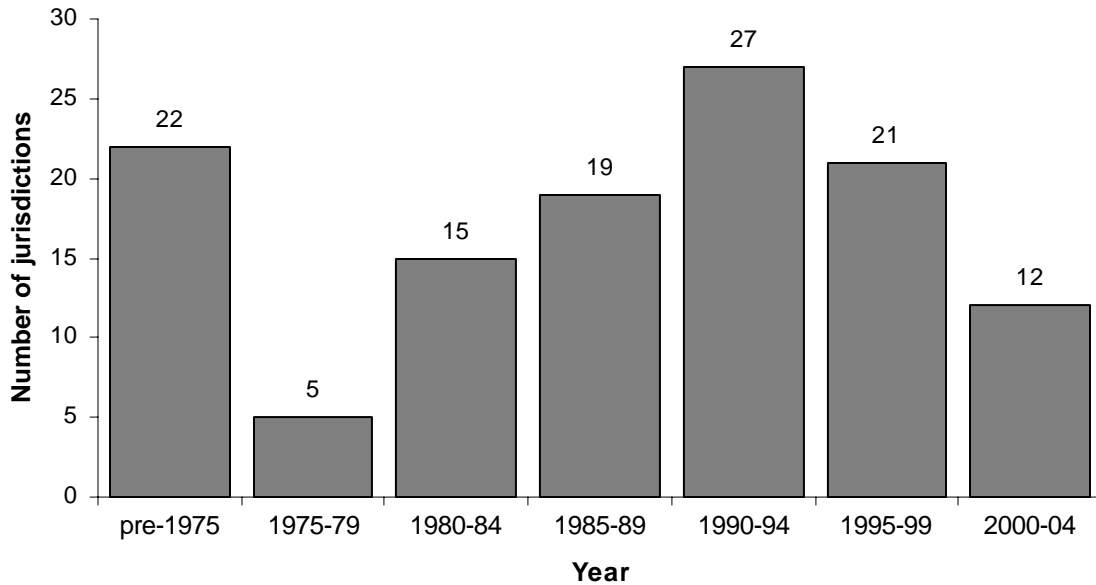
Notes: Excludes 20 jurisdictions that do not indicate a size threshold and three with thresholds of another type (e.g., acreage).

In large part, local review policies have been in place well before the state laws requiring water adequacy (Figure 3). Only one-quarter of those indicating a start date initiated their policy since 1995, the year SB 901 was passed.<sup>14</sup> More than one-third introduced local policies during the period of the last prolonged statewide drought, from 1987 to 1994.

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<sup>14</sup> To recall, SB 901 called for water supply assessments for large projects during the environmental review phase (ACWA, 2002).

**Figure 3**  
**Year of adoption of local review policy**



Sample size = 121

Notes: 59 jurisdictions do not indicate a starting year. The pre-1975 category includes eight jurisdictions that said "always" or "decades."

Only five respondents indicated that their jurisdiction had faced legal challenges over the local review policy, although close to one-quarter did not know the answer to this question.

The survey also sought information on whether water supply concerns have led cities and counties to use building moratoria. A fairly high proportion of jurisdictions – 14 percent – responded in the affirmative (Table 10). In the Central Coast, this figure jumps to roughly half of all communities.<sup>15</sup> The practice has also been far more prevalent in unincorporated areas (40 percent of all counties). The restrictions are ongoing in over half of all cases; in most others, moratoria were in place during drought periods in the late 1970s and from the late 1980s to early 1990s.<sup>16</sup> Communities that have used water-related moratoria are more likely to have local review policies to screen for water supply adequacy.

<sup>15</sup> For the other regions, the rates are not significantly different from the average.

<sup>16</sup> Several respondents indicated that the restrictions were imposed over problems related to the extension of infrastructure rather than to water supply concerns per se.

**Table 10**  
**Have there been any periods where construction permits were postponed or blocked because of water supply concerns?**

|                        | Number of<br>Jurisdictions | (%) |
|------------------------|----------------------------|-----|
| Cities                 | 28                         | 10  |
| Counties               | 14                         | 40  |
| San Francisco Bay Area | 7                          | 12  |
| San Joaquin Valley     | 2                          | 5   |
| Southern Coast         | 5                          | 6   |
| Inland Empire          | 3                          | 13  |
| Sacramento Metro Area  | 2                          | 14  |
| Central Coast          | 14                         | 47  |
| Rest of State          | 9                          | 17  |
| California             | 42                         | 14  |

Sample size = 309

## Water Quality and Land-Use

Although the survey was primarily focused on water supply-related issues, we also sought some basic information on the extent to which cities and counties are factoring water quality into their land-use decisions. About half of all jurisdictions report having some policies in place (Table 11). A primary focus - highlighted by two-thirds of those with policies - is stormwater management. Many in this group mentioned the new federal mandates on urban run-off control under the National Pollution Discharge Elimination System (NPDES). Nearly one in five indicated that groundwater recharge considerations are factored into land-use decisions. About one-quarter of all jurisdictions indicated that they currently had new policies in this area under consideration, including 19 that currently have no policies in place.

**Table 11**

**Some experts have argued that it will be increasingly important for land-use agencies to take into account water quality issues like groundwater recharge and stormwater drainage when making decisions on the location of new subdivisions. Does your city/county currently have any policies of this type?**

|   | Cities | Counties | All |
|---|--------|----------|-----|
| Currently has a policy                                  |        |          |     |
| Number  | 135    | 23       | 158 |
| Share (%)   | 49     | 66       | 51  |
| Type of policy (% of cities or counties with policies): |        |          |     |
| Groundwater (GW) recharge only                          | 7      | 26       | 10  |
| Stormwater (SW) only                                    | 66     | 26       | 60  |
| Both GW and SW  | 7      | 9        | 8   |
| Unspecified   | 19     | 39       | 22  |

Sample size = 309

Not surprisingly, jurisdictions with policies linking water supply and land-use are more likely to have water-quality-related policies as well. Larger cities and counties (as measured by population) are also more likely to adopt quality-related policies. There are, however, no significant regional differences.

## State Water and Land-Use Policies: SB 610 and SB 221

The recent state laws requiring water adequacy for new development call for review at different stages in the project approval process, albeit with broadly similar criteria. SB 610 requires jurisdictions to undertake a long-term water supply assessment during a project’s environmental review. SB 221 requires written verification of long-term water supply by the utility that will serve the project (or, in its absence, by the city or county) at a later stage, prior to the approval of the final subdivision map. Both laws define “long-term” as a 20-year planning horizon, and they share a common trigger for review of residential development: more than 500 residential units, or, in the case of smaller areas, projects that will increase the utility’s water demand by 10 percent or more. Whereas SB 221 is focused almost exclusively on residential development, SB 610’s provisions extend to industrial and commercial developments as well.<sup>17</sup> SB 221 also contains provisions to exempt infill development from review.

The survey requested basic information on which cities and counties had already launched reviews for residential development projects under either statute, the characteristics of those projects, and whether they anticipated launching reviews during the course of 2004.

### Reviews Launched Under SB 610 and SB 221

Half of all counties and one-quarter of all cities have already launched reviews under the provisions of the state laws (Table 12).<sup>18</sup>

**Table 12**  
**State reviews under SB 610 or SB 221**  
 (% of jurisdictions)

|  | Cities | Counties |
|--|--------|----------|
| Launched reviews by late 2003 a/                                     | 25     | 49       |
| Anticipate launching reviews in 2004                                 |        |          |
| Yes  | 18     | 26       |
| Perhaps  | 25     | 26       |
| Jurisdictions that have not already launched reviews but may in 2004 | 26     | 11       |

Sample size = 307

a/ In some cases, this can include January and February 2004.

Two regions stand out: the fast-growing Inland Empire has a significantly higher share of active jurisdictions, and the rural “rest of state” communities have been significantly less active

<sup>17</sup> SB 610 requires review of projects that would demand an equivalent amount of water as a 500-unit residential development and other large commercial and industrial projects (California Department of Water Resources, 2003).

<sup>18</sup> For these questions, two surveys were returned incomplete, reducing the overall sample to 307.

(Table 13). Looking ahead, an even larger number of communities expect that they will or may see review activity over the course of 2004. For one-quarter of cities and 11 percent of counties, this would constitute their first review activity under state law.

**Table 13**  
**Regional distribution of reviews under SB 610 and SB 221**  
**(% of jurisdictions)**

|                        |    |
|------------------------|----|
| San Francisco Bay Area | 20 |
| San Joaquin Valley     | 37 |
| Southern Coast         | 29 |
| Inland Empire          | 46 |
| Sacramento Metro Area  | 36 |
| Central Coast          | 33 |
| Rest of State          | 11 |
| California             | 27 |

Sample size = 307

The number and size of projects reviewed to date vary considerably. About half of the active jurisdictions have reviewed a single project (Table 14). Rather than providing a number, officials in ten communities indicated that they had reviewed “all” or “many” projects. With one exception, these communities also have local review policies in place. It appears likely that they consider the local process – kicking in at a lower threshold – to be compliant with state law as well.

**Table 14**  
**Number of projects reviewed under state law**

|              | Number of<br>jurisdictions |
|--------------|----------------------------|
| 1            | 41                         |
| 2-5          | 29                         |
| 6-20         | 2                          |
| All/many     | 10                         |
| Not answered | 2                          |

Sample size = 307

Table 15 presents the distribution of projects by size for the other jurisdictions. Although the majority of residential projects reviewed is above the 500-unit threshold, roughly one-third falls below this level. This suggests that some communities are going well beyond the requirements of state law in singling out projects for review.



**Table 15**  
**Size of projects reviewed under SB 610 and SB 221**

|                        | Jurisdictions | Projects |
|------------------------|---------------|----------|
| Residential/mixed use: |               |          |
| - Fewer than 10 units  | 5             | 10       |
| - 10-99 units          | 7             | 8        |
| - 100-399 units        | 11            | 13       |
| - 400-499 units        | 8             | 9        |
| - 500 or more units    | 51            | 75       |
| - Other a/             | 2             | 3        |
| Commercial/industrial  | 15            | 20       |

Sample size = 307

a/ includes residential projects with other size indicators (e.g., acres).

To provide some perspective on the survey results regarding SB 610 and SB 221 reviews, it is instructive to compare them with the information appearing in the CEQAnet database maintained by the State Clearinghouse in the Governor’s Office of Planning and Research. Between January 2002 and October 2003, 98 cities and counties reported to the Clearinghouse proposed residential projects meeting the 500-unit size threshold. Our survey sample is broadly representative of this group, with 57 of these 98 agencies responding, the same rate (58 percent) as for the survey as a whole. The comparison of these two sources suggests a high level of compliance with the state thresholds. Only 14 agencies identified in CEQAnet did not report review activity in the survey, whereas the majority (43 agencies) were active (Table 16). Almost as many agencies not appearing in the CEQAnet list – either because their projects were too small or because they were not forwarded to the State Clearinghouse – also reported conducting water adequacy reviews under the state statutes.

**Table 16**  
**A comparison of survey results on SB610/221 and CEQAnet data**  
**on jurisdictions with large residential projects**

|                                  | Cities/counties with<br>large residential<br>projects (CEQAnet) | Other<br>cities/counties | Total |
|----------------------------------|---|--------------------------|-------|
| Reports state review activity    | 43  | 41                       | 84    |
| Reports no state review activity | 14  | 209                      | 223   |
| Total                            | 57  | 250                      | 307   |

Notes: Large residential projects pulled from the CEQAnet database include projects with 499 units or more.

## Linkages Between State and Local Water Adequacy Policies

In light of the high proportion of cities and counties that have some form of local water adequacy policy, it is useful to consider the extent of overlap between local policies and the activity reported under state mandate. It could be argued that the state laws are most essential in communities that do not have local review procedures. To date, two-thirds of jurisdictions that have conducted reviews under SB 610 or SB 221 also have local policies in place (Table 17). If we include those anticipating some review activity in the near term, the state laws will serve as the “safety net” on water adequacy reviews in 20 percent of all local jurisdictions. Fewer than one-quarter of the state’s communities foresee neither state nor local review procedures taking effect. As a group, they have experienced significantly lower housing growth since the mid-1990s; in survey remarks, one-quarter indicated that they are either built-out or not facing any growth pressure.

**Table 17**  
**Local and state review activity (% of jurisdictions)**

|  | Local policy | No local policy |
|--|--------------|-----------------|
| State reviews by end of 2003                             | 20           | 8               |
| Additional jurisdictions that may launch reviews in 2004 | 13           | 12              |
| No state reviews done or foreseen                        | 25           | 22              |

Sample size = 307

## Conclusion and Next Steps

Overall, the survey results suggest that many of California's cities and counties are taking steps to link decisions on land-use and water resources. One aspect of this linkage is through the planning process. In six out of ten cases, city and county departments responsible for land-use decisions participate in the planning activities of their local water utilities. Nearly as many participate in other local and regional policy groups oriented toward water resource management (groundwater, watershed, floodplain).

Another aspect of this linkage is through policies that make the approval of land-use contingent upon water conditions. A majority of local governments – 55 percent of all cities and four-fifths of counties – require an assessment of water availability for the approval of new housing. Roughly half now have policies linking the location of new housing with water quality considerations, such as stormwater management and groundwater recharge.

With a survey of this nature, it is not possible to comment on the depth or quality of the planning and review activities undertaken by local governments. We can note, however, that in some respects, these local initiatives go beyond the current requirements of state law. For instance, water master plans and other types of water planning studies developed through local initiative are more widely available than the urban water management plans mandated for large utilities. Similarly, local water adequacy policies typically require review of *all* new housing, well below the 500-unit threshold that generally applies for state-mandated reviews. In most cases, these policies were adopted prior to 1995, the year of the first state water adequacy law.

The state adequacy laws have nevertheless generated considerable new activity at the local level. Half of all counties and one-quarter of all cities indicated that they had already conducted reviews under the most recent statutes, SB 610 and SB 221, in the two years since they became effective in January 2002. Another quarter of all cities anticipates seeing activity under these statutes over the coming year. Many of these jurisdictions also have local adequacy policies in place. But the new state mandates have already served as a “safety net” for the nearly one-tenth of California's communities that have conducted reviews despite the absence of a local policy. If planners' anticipations about future development projects are borne out, this figure may double within a year or so. It is also possible that some communities with local policies have increased the rigor of their review process since the enactment of the new state laws.

At this stage, we have examined the responses of local planning officials in very broad terms, highlighting differences across regions and across jurisdictions with different types of water utilities. Over the coming months, information from this survey will be used in conjunction with other sources to analyze in greater depth how California's local governments and water utilities are meeting the challenges of finding and managing water for growth.



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## Appendix A. About the Survey

The survey was conducted over several months beginning in November 2003. We mailed a questionnaire to the planning director, or other official identified as being in charge of the planning function, in all 477 of the state's municipalities and the 57 counties with unincorporated areas (i.e., excluding San Francisco). We used mailing lists from the State Clearinghouse and Planning Unit in the Office of Planning and Research and from the League of California Cities. Recipients were invited to refer the survey to another person if they felt they were more knowledgeable about the subject matter.

In addition to an initial postcard reminder mailed to all persons who received the survey, we contacted non-respondents up to twice more by mail to encourage their participation. As shown in Table A.1, this process resulted in a reasonably high response rate (58 percent), comparable to those for the State Clearinghouse and Planning Unit's annual "Book of Lists" surveys (Governor's Office of Planning and Research, 2003a). The responses are representative of population size and housing growth, as measured either by the age of housing recorded in the Census 2000 or by residential construction-permitting recorded by the Construction Industry Research Board. The 274 cities and 35 counties whose responses are reported here account for 21.7 million of the state's residents (61 percent) and more than 535,000 new housing units permitted between 1996 and 2002 (59 percent).<sup>19</sup>

**Table A.1**  
**Overall Response Rates**

| Jurisdiction Type | Total Jurisdictions Surveyed | Number Responding | Response Rate (%) | Share of 2003 Population (%) | Share of New Housing 1995-2000 (%) | Share of New Construction Permits 1996-2002 (%) |
|-------------------|------------------------------|-------------------|-------------------|------------------------------|------------------------------------|---|
| Cities            | 477                          | 274               | 57                | 61                           | 57                                 | 60  |
| Counties          | 57                           | 35                | 61                | 63                           | 55                                 | 55  |
| Total             | 534                          | 309               | 58                | 61                           | 56                                 | 59  |

Sources: Population: California Department of Finance, 2004; New housing 1995 - 2000: Census 2000; Residential construction permits 1996-2000: Construction Industry Research Board, 2004.

Notes: Population share is for 273 out of 476 cities (excluding Goleta). Census 2000 housing share is for 272 cities out of 474. Residential construction share is for 257 cities out of 455 and 31 counties out of 50 (22 cities and 7 counties do not appear in the database).

Overall, the response rates by region are also broadly representative, with jurisdictions in only one region – the Central Coast – responding at a significantly higher than average rate

<sup>19</sup> Between March 1, 2004 and the time of publication, responses from five additional cities were received. Their responses have not been included here, but will be incorporated into subsequent analysis as part of the overall study on water and growth.

(Table A-2).<sup>20</sup> Although officials in this region also have higher than average levels of certain types of local policies linking water and land-use, this does not bias the statewide averages.

**Table A.2**  
**Response Rates by Region**

| <b>Region</b>          | <b>Total<br/>Jurisdictions<br/>Surveyed</b> | <b>Number<br/>Responding</b> | <b>Response<br/>Rate (%)</b> |
|------------------------|---|------------------------------|------------------------------|
| San Francisco Bay Area | 109   | 59                           | 54                           |
| San Joaquin Valley     | 70  | 38                           | 54                           |
| Southern Coast         | 154   | 90                           | 58                           |
| Inland Empire          | 50  | 24                           | 48                           |
| Sacramento Metro Area  | 22  | 14                           | 64                           |
| Central Coast          | 38  | 30                           | 79                           |
| Rest of State          | 91  | 54                           | 59                           |
| California             | 534   | 309                          | 58                           |

Although officials in the city and county departments responsible for land-use completed the vast majority of the surveys, in a handful of cases (11 cities and one county) the initial recipients passed the survey on to water utility officials working for the jurisdiction’s public works or utilities department. Potentially, a response by utility officials could have biased the results of survey questions relating to the relationship between the land-use departments and the water utilities (see chapter on “Water Planning Tools”). However, results are essentially unchanged when we exclude this group from the analysis. Several cities returned two questionnaires filled out by persons with different positions (e.g., city engineer and planner). When the two provided supplemental information, we combined the responses.

All tests of significance reported in the text were done using a linear probability regression specification.

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<sup>20</sup> Although the response rate in the Inland Empire is lower than the average, this difference is not statistically significant.



## Appendix B. Other Survey Questions

As general background information, the survey also asked questions concerning policies on domestic wells and on residential construction-permitting caps.

### Domestic Wells

All counties responding to the survey authorize the use of domestic wells, at least in some areas. For cities, the corresponding figure is 19 percent (Table B.1). Nearly half of the counties and one-fifth of the cities restrict access in some locations because of water supply concerns.

**Table B.1**  
**Does your city authorize households to use domestic wells?**

| Region                 | Yes (%) |
|------------------------|---------|
| San Francisco Bay Area | 25      |
| San Joaquin Valley     | 16      |
| Southern Coast         | 9       |
| Inland Empire          | 22      |
| Sacramento Metro Area  | 25      |
| Central Coast          | 16      |
| Rest of State          | 32      |
| California             | 19      |

Sample size = 274

### Growth Caps

Respondents were also asked to indicate whether their jurisdictions had any general quantitative caps on residential construction permitting. Three counties and 35 cities currently have caps in place, for a statewide average of 12 percent (Table B.2). Two more cities have caps under consideration. The share is highest in the Central Coast (one-third of all jurisdictions), followed by the San Francisco Bay Area. Growth caps are least prevalent in the Inland Empire and the rural “rest of state” counties.

**Table B.2**  
**Does your city/county have any general quantitative caps on annual residential construction-permitting?**

| <b>Region</b>          | <b>Yes (%)</b> |
|------------------------|----------------|
| San Francisco Bay Area | 19             |
| San Joaquin Valley     | 16             |
| Southern Coast         | 8              |
| Inland Empire          | 4              |
| Sacramento Metro Area  | 14             |
| Central Coast          | 30             |
| Rest of State          | 4              |
| <b>California</b>      | <b>12</b>      |

Sample size = 307

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