

SECTION 18 OTHER ENVIRONMENTAL CONSIDERATIONS

Sections 4 through 17 present an assessment of potential adverse impacts to specific resources that could result from the Proposed Project. This section discusses additional environmental issues associated with the Proposed Project including:

- Significant Irreversible and Irretrievable Commitment of Resources;
- Growth Inducing Impacts;
- Cumulative Impacts;
- Effects Found Not to be Significant; and
- Unavoidable Adverse Impacts.

18.1 SIGNIFICANT IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

This section considers the effects of the Proposed Project that would result in a commitment of resources and uses of the environment that could not be recovered if the project were constructed. An irreversible or irretrievable commitment of resources would occur when resources were either consumed, committed, or lost as a result of the Proposed Project. The commitment of a resource would be “*irreversible*” if the project started a process (chemical, biological, or physical) that would not be stopped. As a result, the resource of its productivity or its utility would be consumed, committed, or lost forever. Commitment of a resource would be considered “*irretrievable*” when the project would directly eliminate the resource, its productivity, or its utility for the life of the project.

The Proposed Project would result in permanent changes to the existing environment as discussed in other sections of this Program EIR.

In addition to the commitment of land to urban uses, implementation of the Proposed Project would involve the consumption of energy derived from nonrenewable sources, such as fossil and nuclear fuels. Building materials could be considered permanently consumed, although these might be recyclable in part at some future date. These changes would be irreversible.

18.2 GROWTH INDUCING IMPACTS

18.2.1 Introduction

The purpose of this section of the Program EIR is to evaluate the potential for growth-inducing effects of the Proposed Project. The CEQA Guidelines require a discussion of the ways in which a project could potentially foster economic or population growth or the construction of additional housing in the surrounding environment. This discussion should include the characteristics of the proposed project that may encourage or facilitate future growth that, either individually or cumulatively, could significantly affect the environment.

The CEQA Guidelines require a discussion of growth inducement; but, the Guidelines do not require speculation as to exactly when and where growth may or may not occur, and what form that growth may take. Speculation does not provide the reader with accurate or useful information about the proposed project's potential effects.

The Master Plan is a long-term planning document that will be implemented over the next 27 years. Therefore, the Water Authority is preparing a Programmatic EIR as the appropriate level of CEQA review. As a long-term planning document, the Master Plan is inherently flexible. The Water Authority must respond to the needs of its member agencies, which may require changes in water supply planning during the term of the Master Plan. Because the projects anticipated by the Master Plan may not be built for a number of years, if at all, and may vary from the proposals found in the Master Plan, the Water Authority will conduct additional environmental review for each project that is developed pursuant to the Master Plan. This Program EIR is a starting point, or foundation, for future environmental documents.

Projecting future growth is always a difficult task. The Water Authority's statutory obligation is to provide water at wholesale to meet the needs of its public agency members. Historically, the Water Authority has relied upon regional population projections of other government agencies to help it determine regional water supply requirements. It has also done so for purposes of the Master Plan. Predicting the growth-inducing effects of the Master Plan, except in a very general manner, is speculative because of the regional nature of the Master Plan, the regional nature of the Water Authority's supply obligations, the Water Authority's lack of land use authority, and the long time frame (27 years) of the Master Plan. The Water Authority provides water on a regional basis covering 18 cities and portions of the unincorporated county, each with its own constituency, governing ordinances and general plan. In addition, the Water Authority's service area is subject to the purview of SANDAG, which has an important advisory role in regional growth planning. Because the Water Authority does not have land use approval authority, it can neither directly cause nor prevent growth. The Water Authority cannot approve a subdivision or industrial park, or impose a building moratorium. How and where development occurs in the Water Authority's service area is dictated by the local land use agencies with local land use approval authority.

To evaluate the Proposed Project's potential growth-inducing effects, it is necessary to examine the relationship between water supply and land use planning. This section describes this relationship as well as the statutory and regulatory framework governing the provision of water on a regional basis.

In examining the possible growth-inducing effects of the Proposed Project, this section will discuss the following:

- Regional planning within the Water Authority's service area and the respective roles of SANDAG, the local land use agencies, and the Water Authority in planning for future growth;
- State law requirements that affect the Water Authority's planning efforts for future growth and the legal authorities that mandate use of SANDAG's growth forecasts;

- The purpose of the Master Plan, its four guiding principles and its use as a road map for future water-planning decisions;
- How and why water facilities are developed in response to, although in advance of, anticipated growth;
- The direct and indirect effects the Proposed Project may have on economic and population growth; and
- The speculative nature of potential growth-inducing effects.

18.2.2 Setting: Regional Planning in San Diego

The population of San Diego County has increased every year since 1944, the year the Water Authority was formed. While growth in the region has been sustained during this period, some periods of growth have been more rapid than others. In addition to substantial fluctuations in population growth, the region has also faced severe drought conditions (in particular during the period from 1987 to 1992) when it was faced with substantial water supply cutbacks.

18.2.2.1 Role of SANDAG

SANDAG is the regional planning entity for the San Diego region. SANDAG is comprised of representatives from 18 cities and the County government, which serve as the forum for regional decision-making. The Water Authority is an Advisory Member on the SANDAG Board of Directors. SANDAG makes strategic plans, obtains and allocates resources, and provides information on a broad range of topics pertinent to the region's quality of life. In addition, through implementation of the 1992 MOA, which will be discussed below, the Water Authority and SANDAG maintain ongoing communication and coordination to ensure that the future water supply needs of the San Diego region can be accommodated.

SANDAG is currently in the process of preparing a Regional Comprehensive Plan (RCP). The purpose of the RCP is to provide local jurisdictions with policy guidance on accommodating the growth projected by SANDAG. The release of the draft RCP for public review and comment is expected in December 2003. As an Advisory Member to the SANDAG Board of Directors, the Water Authority will fully participate, cooperate and support each of these processes as they develop. The goal of the RCP is to ensure internal consistency with respect to long-term regional water supply planning to meet the needs of the Water Authority member agencies through the year 2030. The RCP will receive environmental review pursuant to CEQA.

18.2.2.2 Role of SDCWA

The Water Authority provides water at wholesale to meet current and projected regional water supply needs for regional populations identified by SANDAG, and advises local governments regarding water supply issues. The Water Authority is mandated by its principal act, the County Water Authority Act (Stats. 1943, c. 545) to provide water to meet the needs of member agencies in its service area. The County Water Authority Act, Section 5(11), provides that the Water Authority Board of Directors “as far as practicable, shall provide each of its member agencies

with adequate supplies of water to meet their expanding and increasing needs.” The Water Authority’s statutory purpose and direction is to provide a safe, reliable water supply for its service area, both present and future. Because of significant population changes over the last 60 years and the constant concern of drought (for a region largely dependent on an imported water supply), the Water Authority initiated efforts to diversify its mix of water supply sources, and corresponding facilities, to increase reliability and reduce competition with other water users outside of the region. The Master Plan represents the Water Authority’s water planning efforts to accommodate the growth projected by SANDAG in accordance with the 1992 MOA. (See discussion of MOA below.)

18.2.2.3 Role of the Cities and County

The Water Authority serves 18 cities and portions of unincorporated territories in the County of San Diego, all of which are members of SANDAG. The cities and County have designated SANDAG as the regional planning board pursuant to a voter approved proposition, which is discussed below. The cities and County provide SANDAG with information about their general plans, local growth patterns, and land use regulations, and in return SANDAG generates regional management plans and population forecasts. As members of SANDAG, the cities and County review and approve all plans and forecasts prepared by SANDAG. The cities and County use SANDAG’s findings to develop and shape their respective general plans and land use regulations. The County and each city are required to adopt a general plan, which must be updated on a regular basis. All general plans and subsequent amendments are subject to CEQA review.

18.2.2.4 Relationship Between SANDAG, the Water Authority, and the Cities and County in Regional Planning

SANDAG has been preparing long-range forecasts of population, housing and employment since the 1970s. SANDAG’s forecasts represent the changes anticipated for the region based upon the best available information at the time the forecast is produced and use of established computer models that evaluate land use, demographics, regional and local economics, and transportation patterns. The SANDAG forecasts utilize a complex set of assumptions, input data, computations, and model interactions.

In 1988, San Diego County voters passed Proposition C. This proposition required the cities and the County to establish a regional board to prepare a “regional growth management plan.” The cities and the County designated SANDAG as the regional board. Proposition C grants the regional board “the authority to require that the County and the cities adopt the necessary legislation to implement the regional growth management plan.” (See Proposition C Section B.)

The Water Authority and SANDAG entered into a MOA in 1992 where the Water Authority “agrees to use SANDAG’s most recent RGF for planning purposes.” The MOA serves to ensure that there is “consistency between the plans, policies, and ordinances of the cities and County, and the plans and programs of the Water Authority.” (See MOA Section 4.) The Water Authority utilizes the SANDAG RGF to develop demand projections to be used in its water supply and facility planning. The MOA ensures that the water demand projections for the San

Diego region are linked with SANDAG's RGF and that water supply is a component of the overall growth management strategy and regional comprehensive planning efforts. According to SANDAG's 2020 *Cities/Counties Forecast Overview*, the RGF is also used by regional and local governmental entities throughout the region to prepare water and air quality strategies, housing and environmental studies, and the Regional Transportation Plan; to conduct project reviews under the Intergovernmental Review process; assess growth impacts; project changes in service levels for public facilities; and ascertain needs for new or expanded facilities. By using the RGF, the various local agencies' plans can be made consistent with one another.

The 19 local jurisdictions provide input to SANDAG for its growth forecasting and for its development of policies to help the local agencies respond to forecasted growth. The RGF is reviewed by a Technical Review Committee, which is comprised of experts in demography, housing, economics and other disciplines from local and State agencies, local universities, and the private sector. Finally, the RGF is reviewed by all cities and the County member agencies, various groups, and members of the public. Comments resulting from this review along with new census data, when appropriate, and updates to the U.S. Economic Forecast are incorporated into the final RGF.

18.2.2.5 SANDAG Regional Growth Forecast Population Projections: Methodology and Key Assumptions

As discussed above, local agencies throughout the San Diego region use the RGF to assist with long-range land use decision-making. The Water Authority is required to rely upon SANDAG's RGF for its water planning needs and capital improvement programming processes as is discussed in greater detail in Section 18.2.3 below.

SANDAG's preparation of the 2020 RGF was a two-step process. First, SANDAG created a regional forecast for the total growth in the San Diego region through the use of economic and demographic factors using the Demographic and Economic Forecasting Model. This region-wide forecast was based on factors including birth and death rates; migration; and national, state and local economic trends and conditions. Second, SANDAG allocated the growth identified in the regional forecast to the 18 cities and County using the Urban Development Model. For the City and County of San Diego the allocations were also made for each community plan area. These allocations were based on local land use policies including general plans, transportation systems and the spatial relationships between activity locations within the region.

The last official SANDAG forecast, the 2020 RGF, was approved for use by the SANDAG Board of Directors in February 1999 and its numbers were certified for use in all regional plans and studies, including those conducted by the Water Authority. The 2020 RGF predicts that local population, employment, and income will grow steadily throughout the next 20 years. The region should see an average annual population increase of 46,400 through 2020. Total population is projected to reach 3.85 million by 2020, roughly one million more than in 1998. Most of the projected growth in population – about 60 percent – will be the result of natural increase (more births than deaths), not due to migration to the area.

The Water Authority uses a number of the many outputs that the SANDAG Urban Development Model (UDM) model produces in the Water Authority's SDCWA-MAIN model, which forecasts the water needs of the individual member agencies. The regional water demand projections in SDCWA's 2000 UWMP are based on the SANDAG 2020 growth projections for occupied single family housing, occupied multifamily housing, total employment and employment by major industry group, persons per household, housing density, and household income. These are the inputs that went into the SDCWA-MAIN model for the Master Plan.

SANDAG is in the process of preparing a new growth forecast (2030 RGF) based on the 2000 Census data. A preliminary forecast has been released which shows a slight decrease from the 2020 forecast in the rate of projected growth. SANDAG is currently soliciting input from the cities and County in order to finalize the forecast by October 2003. Upon release of the SANDAG Final 2030 RGF, the Water Authority will update its regional water demand forecast.

The methodology used by SANDAG to develop the Preliminary 2030 RGF is summarized below. A complete discussion of the formal process utilized by SANDAG in its efforts to forecast future population growth for the San Diego region is presented in the *Preliminary 2030 Forecast Process and Model Documentation* (SANDAG 2003) and can be viewed electronically at http://www.sandag.org/uploads/publicationid/publicationid_833_1847.pdf. SANDAG utilizes four models in its 2030 forecast which look at land use, demographics, economics, and transportation variables. Key variables likely to affect future population growth within a region include: residential land availability, housing stock, commute times, and job supply. The models include:

- Demographic and Economic Forecasting Model;
- Interregional Commuting Model;
- Urban Development Model; and
- Transportation Forecasting Model.

All of the models used at SANDAG incorporate “best practices” used by Metropolitan Planning Organizations (MPOs) and councils of governments throughout the nation. In addition, SANDAG continually evaluates and refines its models and incorporates updated techniques and information as necessary. In its preliminary 2030 RGF, SANDAG has projected that, while the region is expected to continue to grow in terms of overall population, growth through 2030 is expected to slow from the previous 2020 regional population forecast. Although this growth rate is slower than previously projected, the San Diego region is still growing at twice the rate of the nation as a whole. While SANDAG employs some of the most sophisticated growth projection modeling available, unpredictable circumstances such as changes in the national and state economy, changing political priorities, and significant world events cannot be accounted for or predicted.

According to SANDAG, the preliminary 2030 RGF differs from the 2020 RGF in three important ways. First, the 2000 Census revealed the region's population to be about 100,000 lower than the California Department of Finance had estimated. Second, new data indicate that

the fertility rates, especially among Hispanics, dropped dramatically in the 1990s. Third, there has been a significant increase in interregional commuting from Riverside County and Baja California. Because of these events, the preliminary RGF for 2030 is about the same number that was previously predicted for 2020: about 3.9 million people. Thus, for the year 2020, the preliminary RGF projects a total of 250,000 fewer people in the region than did the previous RGF. Of that 250,000, 100,000 is the result of lower Census counts, another 100,000 is due to lower fertility rates, and 50,000 is attributable to increased interregional commuting.

However, while according to this preliminary 2030 RGF the region will grow at a slower rate, it is important to emphasize that one million more people and 500,000 new jobs are still expected to come to the region over the course of the next 27 years and the region needs to plan accordingly. By 2030, the region is still expected to experience the same amount of growth overall as was originally expected to occur in 2020. Therefore, only the timing of the growth has changed, which could impact the timing of the needed facilities. The overall long-term facility requirements for the region remain the same under the 2020 RGF and the preliminary 2030 RGF. Quality of life and protection of the environment can be improved by making smarter long-term planning choices rather than building in a haphazard, hurried and reactive mode. A long-range Master Plan, such as this, is integral to making smart long-term planning choices for the region.

18.2.2.6 Annexation of New Service Territories and Participation in Regional Planning Efforts

There is currently a formal procedure in place for lands to be annexed to the Water Authority's service area and receive imported supplies purchased from MWD. This detailed process requires concurrent annexation to a Water Authority member agency, the Water Authority, and MWD. MWD has established an annexation procedure in its administrative code that requires certain conditions to be met prior to approval of the annexation. These conditions include:

- Provide a description of the existing and proposed development plans for parcels to be annexed, and an estimate of total annual and peak demands for water service to the parcels;
- Obtain Local Agency Formation Commission approval of the annexation to member public agency;
- Conduct CEQA compliance;
- Obtain resolutions from MWD, the Water Authority, and the Water Authority member agency supporting annexation;
- Payment of annexation fees and charges; and
- Submit a plan for implementing water use efficiency guidelines. The guidelines state that to the extent practicable, the local water purveyors and parcel owners shall comply with certain requirements, summarized below:
 - The use of local supplies, such as groundwater, surface water, and reclaimed water shall be maximized to reduce demands for imported water.

- Reclaimed water or other non-potable water shall be used on landscaped areas exceeding one acre, for industrial processes, and for other suitable uses. If such supplies do not presently exist, a dual distribution system shall be constructed to accommodate such supplies when they become available in the future.
- Peak demands shall be minimized by construction and operation of local storage and groundwater production facilities.

BMP conservation measures shall be applied in all new and existing developments within the annexed area. At least one model home constructed in each new development within the annexed area shall demonstrate a water conserving landscape.

18.2.3 State Law Requirements for the Coordination of Land Use and Water Supply Planning

Land use decisions are necessarily predicated, at least in part, on assumptions about available water supply. To ensure that a sufficient water supply is available to accommodate planned land uses, the Legislature has established a balance in authority between local land use agencies and water suppliers. This balance preserves in cities and counties the authority to plan and regulate land use, while simultaneously requiring that water agencies provide information to assist cities and counties to make educated and responsible land use decisions. While water suppliers provide information to cities and counties that is used in developing general plans, water suppliers do not have the authority to make land use decisions. Water supply planning is responsive to land use planning.

18.2.3.1 Jurisdiction to Regulate Land Use Rests With Cities and Counties

The police power is the legal basis for local land use regulation. The California Constitution establishes the police power and grants cities and counties the authority to make and enforce local police, sanitary, and other ordinances and regulations not in conflict with general laws. Courts broadly interpret the local police power and have upheld local land use regulations ranging from aesthetic requirements to total bans on certain land uses. One of the most important products of the local land use authority is the general plan. State law mandates that all cities and counties adopt a general plan. The general plan, often referred to as the “constitution” of local planning, is the single most important land use document for cities and counties as it provides the blueprint for development and controls all land use decisions. All zoning, subdivision, and development regulations must be consistent with the general plan.

A general plan consists of seven mandatory elements and any optional elements a city or county desires to include. Each element has equal legal status and the provisions of the general plan must be consistent among the elements. The mandatory elements are: land use, circulation, housing, conservation, open-space, noise, and safety.

The land use element designates the proposed general distribution and intensity of land uses. The land use element is required to contain a statement of standards of population density and building intensity for the various districts and other territory covered by the plan. (Gov. Code

§65302(a.) The conservation element addresses the conservation, development, and utilization of natural resources including water. The portion of the conservation element, including water, must be developed in coordination with any county-wide water agency and with all district and city agencies that have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. The coordination must include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city or county. (Gov. Code §65302(d).) The safety element is required to address “peak load water supply requirements.” (Gov. Code §65302(g).) As with all natural resources, cities and counties must consider how water supply may affect future development. Cities and counties are responsible for determining how best to utilize and incorporate the available water supply into their general plans.

General plans receive environmental review pursuant to CEQA. Such review can be included within the general plan itself (CEQA Guideline §15166) or in a separate Program or Master EIR. This stage of review is generally more conceptual and abstract than a project EIR because of the general nature of the programs being evaluated. Later, as individual projects are reviewed, the Program EIR is incorporated by reference allowing the project EIR to focus on new or site-specific impacts. (CEQA Guidelines §§15168(d), 15152.)

As stated above, State law requires that the water supply portion of the general plan be developed in coordination with the local water supplier. Cities and counties are required to identify an actual and reliable water supply that can support the goals and policies of the general plan. Reliance upon mere entitlements or “paper water” is not permitted. By coordinating with regional and local water suppliers, cities and counties gain information as to the available level of water resources that can be expected from the water supplier, and the water supplier can plan for potential future demand based upon the local agency's general plan. However, this coordination does not give the water supplier any authority to regulate land use or independently implement the general plan. The water supplier is part of the general plan process simply to assist the city or county develop its general plan.

18.2.3.2 The Water Authority Provides Water in Response to Local General Plans and Regional Growth Forecasts

The obligations and duties of a water supplier are very different than those of a city or county. Unlike a city or county, water suppliers do not have constitutional authority to regulate and control land use. Instead, water suppliers coordinate with cities and counties to ensure that general plans accurately reflect the available water supply. It is important to note that the responsibility to plan and approve development in accordance with the information provided by the water supplier falls on the city or county.

In addition to regular consultation with SANDAG, the cities, and the County, the Water Authority meets its coordination obligation through the development and implementation of an UWMP. The Urban Water Management Planning Act governs UWMPs (Part 2.6 of Division 6 of the Water Code (commencing at § 10610)). UWMPs are required of all urban water suppliers, i.e., public or private water suppliers directly or indirectly providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 ac-ft/yr of water (Water Code § 10620. Urban water suppliers are defined in Water Code § 10617). Plans must be

updated every five years (Water Code § 10621). An urban water supplier is required to implement its adopted plan according to the schedule stated in the plan (Water Code § 10643), and actions taken that are not consistent with the plan are subject to challenge (Water Code § 10650, subdiv. (b)). Challenges are limited to inquiry of whether there was a prejudicial abuse of discretion, which is established if the supplier has not proceeded in the manner required by law or the action is not supported by substantial evidence (Water Code § 10651). Plans are adopted pursuant to an open public process that includes a public hearing (Water Code § 10642). Unlike general plans, the preparation and adoption of an UWMP is statutorily exempt from CEQA. However, this CEQA exemption does not extend to implementation of projects contemplated by a plan other than the preparation of a draft water shortage contingency plan (Water Code § 10652).

Generally, an UWMP describes and evaluates sources of supply, reasonable and practical efficient uses, reclamation, and demand management activities. The components of the UWMP may vary according to an individual community or area's characteristics and its capabilities to efficiently use and conserve water. The UWMP addresses measures for residential, commercial, governmental and industrial water demand management and provides a strategy and time schedule for implementation. (Water Code §10615.)

Water Code §§10631 (detailed general content requirements), 10632 (water shortage contingency analysis), 10633 (recycled water analysis), 10634 (water quality and effects of quality on management strategies and supply reliability) and 10635 (water service reliability for normal, single dry and multiple dry years) provide the specific requirements for the contents of the UWMP. UWMPs are supposed to plan for population and water uses looking ahead 20 years, in 5-year increments (Water Code §§ 10631, subdiv. (a), 10635, subdiv. (a)). Population estimates must be based on information from the "state, regional or local service agency population projections within the service area" of the supplier (Water Code § 10631, subdiv. (a)).

The Water Authority's UWMP describes and evaluates sources of supply, reclamation, and demand management activities. It also considers the water demands for population and water uses through the next 20 years, and is based upon the RGF projections provided to the Water Authority by SANDAG which are calculated using, in part, information provided to SANDAG by the cities and the County. The UWMP tells SANDAG, the cities, the County and the Water Authority's member agencies how the Water Authority plans to meet its long-term supply goals. The Water Authority is required by State law to implement the UWMP and to update the plan every five years. In this way, the UWMP is a response to the growth projections and plans of the cities and the County that are serviced by the Water Authority.

The Water Authority intends to review the implementation of the Master Plan concurrently with the five-year revisions of the UWMP. Implementation of the Master Plan will be accelerated or slowed consistent with SANDAG's RGF and the Water Authority's UWMP as they are adopted in the future. SANDAG projects growth based in part upon the local general plans. The Water Authority, in turn, determines the need for and timing of additional water supplies and facilities based upon the SANDAG growth projections and the UWMPs of the Water Authority's member agencies. In this way the Water Authority can ensure sufficient reliable supplies for the region concurrent with demand.

18.2.3.3 State Law Requires the Water Authority to Coordinate Planning Efforts With SANDAG

The Water Authority's water planning activities are required to be based on the SANDAG RGF. In 1992, SANDAG and the Water Authority entered into a MOA which details how the two regional agencies coordinate to ensure the availability of water for future growth. Under the MOA, the Water Authority agrees to use SANDAG's most recent regional growth forecasts for regional water supply planning purposes, to provide updated information on changes in plans or programs, and to implement relevant actions contained in the Water Element of the Regional Growth Management Strategy. The MOA ensures that water demand projections for the San Diego region are linked with SANDAG's growth forecasts and that water supply is a component of the overall Regional Growth Management Strategy discussed above.

The Legislature has recognized the unique regulatory and planning structure in San Diego County. It has required the Water Authority's adherence to the MOA as one of the criteria for the Governor's Office of Planning and Research's determination that the Water Authority's water supply assessments and written verification comply with Sections 10910-10915 of the Water Code. (See Water Code §10915(e).) SANDAG revises its RGF every five years. Thus, both water availability and regional growth projections are driven by the same set of forecasts and are both periodically reassessed at the same time as part of the growth forecast update process. The RGF is also used by the Water Authority's member agencies as part of their long-range planning and capital facilities programming.

In 1995, the Legislature passed SB 901, which requires planning agencies to consider information provided by water agencies in their decisions to approve or deny commercial, industrial, or residential development. The State has determined that Proposition C, adopted by San Diego County voters in 1988, is functionally equivalent to the requirements of SB 901. Under Proposition C, SANDAG was charged with developing a Regional Growth Management Study and was designated by the cities and County government as the Regional Planning and Growth Management Review Board. Thus, the relationship established between SANDAG and the Water Authority satisfies SB 901.

18.2.3.4 SB 610 and SB 221

Two new pieces of legislation were passed in 2002 to ensure that cities and counties adequately consider the availability of water resources when considering proposed development. SB 610 (Costa) and SB 221 (Kuehl) address the concerns that growth is outpacing both water supply planning and the ability of water providers to meet the growing demand for water. Although these bills are not planning bills, they help to demonstrate the importance of coordinating land use planning and water supply planning in California so that water is available concurrent with development.

SB 610 requires, among other things, that a water supply assessment (WSA) be included as part of any environmental review of most large projects. If, as a result of the WSA, it is determined that a sufficient supply is not available to serve the proposed project, the water supplier must describe the plans to acquire or develop additional supplies. These plans must include

information regarding funding, permit requirements and timing of supply development to the extent applicable. The WSA must be included in the CEQA documents for the project, and the city or county must determine, based on the entire record, whether the water supplies will be sufficient to satisfy the demands of the project. If the city or county determines that the supplies will not be sufficient, that determination must be included in the findings for the project.

SB 221 requires land use agencies to verify the existence of a “sufficient water supply” as a condition of approval of most maps or development agreements for residential subdivisions of 500 or more dwelling units. As with SB 610, this requirement is also imposed if the water supplier has fewer than 5,000 service connections and the project will increase the number of connections by at least 10 percent. Proof of a sufficient water supply is based on a written verification from the public water system that will serve the development.

If a water supplier determines it is unable to provide sufficient water for the proposed subdivision, the city or county has authority to make an overriding determination. Such a determination must be supported by substantial evidence that additional water supplies, not accounted for by the water supplier, are or will be available to satisfy the requirements.

While imposing a burden on water agencies to provide accurate and realistic water supply information, the combined effect of SB 610 and 221 is to impose the ultimate responsibility for determining the sufficiency and availability of water on cities and counties as part of their environmental review and approval processes.

18.2.4 Water Supply Facilities Must be Developed in Response to Growth Projections

Because the planning and execution of major water projects can take many years, even a decade or more, it is essential that these projects be undertaken based on projected future water demands rather than on demands currently existing at the time project planning begins. If this were not so, perpetual water shortages endangering public health and safety would exist and, in fact, would become the norm.

The planning and execution of a major water project occurs in incremental stages. The initial stage is typically development of a master service plan, such as the Water Authority’s Master Plan, which anticipates a certain amount of future growth as projected by responsible land use agencies. This is followed by a project-specific planning effort, followed by a project design effort, followed generally by a right-of-way and regulatory permit acquisition effort, and only then will actual project construction begin. While the actual construction phase of a project may only take 1 or 2 years, the entire process may take up to 7 to 10 years. This sequence of events, therefore, provides many opportunities to review the actual growth experienced as opposed to the assumed master-planning-level basis of growth. Individual projects coming out of a master plan would be subject to additional environmental review when the project-specific planning effort begins.

For example, prior to the actual start of construction, development of the water supply project could be deferred if the actual growth pattern is markedly lower than the growth level anticipated

at the master planning stage. If the project is by its nature divisible into phases or stepped development, construction can be limited to phase(s) appropriate to the actual growth rate. The Water Authority will develop facilities concurrent with needs and development plans, based always on the most current growth projections.

18.2.5 Nature and Purpose of the Water Authority’s Master Plan

The purpose of the Master Plan is “...to evaluate the ability of the Authority to continue to meet its mission based on current plans for water supply and facility improvements, and to recommend any additional facilities and improvements to existing facilities needed to cost effectively meet the Authority’s mission through 2030.” The Master Plan is designed to serve as the “roadmap” for implementing the major capital improvements needed by the Water Authority to meet demands through 2030.

There are four guiding principles that have shaped the development of the Master Plan. The guiding principles are to:

- Plan for future treated and untreated water supplies and facilities to meet the projected demands of a growing regional population;
- Protect the public health, safety and welfare by maintaining and enhancing a safe and reliable supply of water;
- Plan facilities that are cost-effective; and
- Provide an ability to adjust facility plans to meet changes in future demands.

Inherent in the Master Plan is a built-in flexibility designed to allow the Water Authority to respond to slowed or accelerated population growth and associated water demand within the region. The Water Authority will adjust the implementation schedule for appropriate Master Plan elements consistent with future revisions of SANDAG’s RGF and the Water Authority’s UWMP.

18.2.5.1 Planning for Reliability

Comments received during scoping for the Program EIR requested that “reliability” be clearly defined in the Master Plan, and suggested that a high level of reliability may have growth-inducing effects. Without understanding that ‘100 percent reliable’ is only meaningful relative to a given scenario for acceptable level of service, the public may interpret the term to indicate that ‘unlimited water will be available 100 percent of the time’. No alternative in the Master Plan is considered “100 percent reliable” in this “unlimited supply” sense.

Each of the three alternatives proposed in the Master Plan meet a minimum criterion of having “less than a 1% chance in the year 2020 of having a shortage of greater than 75,000 acre-feet per year, when considering weather variation and uncertainty of local project implementation.”

There is not an accepted industry standard of reliability performance, neither is there an explicit agreement among the Water Authority's member agencies or Board members about what such a standard should be. There is an implicit message in the Master Plan that all three alternatives are "reliable" in the sense of meeting the Water Authority's basic mission to provide a "safe and reliable" supply.

There is, nevertheless, a general sense that "more reliable" is more desirable than "less reliable." Alternative 2, (Conveyance of Supplies From the West, or Regional Seawater Desalination), is more expensive than Alternative 1, (Conveyance of Supplies From the North, or MWD with Pipeline 6), but it is more reliable in a demonstrably quantitative way. The judgment of the Water Authority is that the additional expense may be more than justified by the additional reliability, and therefore that Alternative 2 is the preferred alternative of the Master Plan.

The Water Authority's Master Plan identifies seawater desalination as its preferred future water supply option because it provides maximum benefits of reliability, diversification of sources, and improved water quality at prices expected to be comparable to the next increment of available imported water. Other available water supply options, including those relied on currently by the Water Authority, require importing from great distances outside the San Diego region; are subject to interruption from seismic events; are increasingly subject to complex environmental constraints; and are prone to drought, political pressures, shifting regulatory policies, and fluctuations in overall water quality. Enhanced reliability associated with the seawater desalination water supply option is derived from the following benefits:

- Desalinated seawater diversifies the available regional water supply;
- Desalinated seawater increases local self reliance;
- Desalinated seawater is drought proof; and,
- Desalinated seawater provides for enhanced long-term price stability for ratepayers.

The pertinent question is whether the choice of a preferred alternative based upon higher than mere minimum reliability is growth inducing in and of itself. The quantitative measure of reliability in the report makes it clear that the preferred level of reliability chosen is not "unlimited water 100 percent of the time." The seawater desalination alternative does not guarantee a "shortage free" condition for the population forecast by SANDAG. The choice presented in the Master Plan therefore neither supports nor encourages growth to a greater degree than presently estimated by SANDAG, and is therefore not inherently directly growth inducing.

18.2.6 Master Plan Effects on Growth

An EIR must evaluate any reasonably foreseeable growth-inducing effects of a project but not speculative effects. Growth-inducing effects may be direct or indirect. CEQA does not require that an EIR anticipate and mitigate the speculative effects that a particular project may have on growth.

18.2.6.1 Direct Growth-Inducing Effects

As stated earlier in this section, the Master Plan cannot directly create or induce growth in the San Diego area because the Water Authority has no land use authority. Without land use jurisdiction, the Water Authority cannot directly induce or foster growth because it cannot approve land development. The cities and counties must approve development, not the Water Authority. Therefore, the Master Plan cannot directly effect or foster growth in the surrounding environment.

18.2.6.2 Indirect Growth-Inducing Effects

An indirect growth-inducing effect is one that could lead to future growth or remove a barrier to growth. To evaluate the possible indirect effect the Master Plan may have on growth within the region, it is important to understand some of the traditional barriers to growth. These may include the following:

- Lack of transportation facilities for the population to travel between their place of employment, recreational facilities, service facilities, shopping and their homes;
- Lack of educational facilities including elementary and high school facilities, secondary education facilities, and vocational institutions;
- Employment patterns such as high unemployment or limited employment opportunities within the region;
- Availability of housing to accommodate all income categories;
- Availability of wastewater treatment capacity;
- Availability of emergency services such as police, fire, and medical facilities;
- Availability of electricity; and
- Availability of water supply and distribution.

While the lack of water availability may be a potential barrier to growth, it is but one of many such barriers. If water availability were the primary barrier to growth, development in California would look much different than it does today. Northern regions of the State, where water is relatively abundant, would be demonstrably more developed than the more arid southern regions. Instead, a multitude of factors control where and to what extent growth occurs in California, with water being one such factor.

The Master Plan is intended to plan for the future water needs of the San Diego region. Water supplies planned through the Master Plan will service both new and existing customers. Therefore, the Master Plan has the potential to indirectly foster growth by making water available to new development, thus removing a potential barrier to growth.

18.2.6.3 Potential Indirect Effects of Growth are Speculative at This Time

Drafting an EIR necessarily involves some degree of forecasting. While an agency must use its best efforts to find out and disclose all that it reasonably can about the potential effects of the

proposed project, it may not engage in speculation. Speculation of unspecified and uncertain future effects that cannot be reasonably evaluated serves no purpose and may mislead the reader as to the project's actual effect. If, after a thorough investigation, an agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact. (CEQA Guidelines § 15145.)

CEQA is concerned with physical changes in the environment, not intangible effects. In order to evaluate the physical changes in the environment that may occur due to the implementation of the Master Plan, it is necessary to identify where and to what extent future growth will occur. As discussed in this section, the Master Plan is based upon the SANDAG regional forecast. As the name suggests, the SANDAG regional forecast constitutes a forecast only. RGFs are based on a variety of assumptions, projections, and mathematical models. The SANDAG forecast uses four distinct models (Demographic and Economic Forecasting Model, Interregional Commuting Model, Urban Development Model, Transportation Forecasting Model), each of which identifies and relies upon separate assumptions and key factors to project growth. SANDAG continually updates these models and incorporates new techniques to more accurately predict future growth. While SANDAG makes its best effort to anticipate growth patterns, it cannot control when, where, and how growth will occur through 2030, and what physical changes to the environment may occur due to the projected growth. Because the Water Authority is mandated by law to rely on SANDAG growth forecasts, the Water Authority is dependent upon SANDAG for information on future growth. Just as SANDAG cannot control the exact location of future growth, the Water Authority cannot speculate with any certainty what physical changes in the environment may occur over the next 27 years due to growth, and what role, if any, the Master Plan will have on future growth.

As discussed earlier in this section, cities and counties are ultimately responsible for how growth occurs – or does not occur – in their respective jurisdictions. Cities and counties control growth through the exercise of their police powers and implementation of their general plans. In assessing the Master Plan's potential indirect growth inducing effects and any associated physical impacts on the environment, one must consider how cities and counties will implement their general plans through 2030.

The Water Authority's planning horizon for the Master Plan is much longer than the typical general plan. As previously discussed, the Water Authority must plan its infrastructure well in advance so that it is in place when needed. Water supply planning requires a much longer planning horizon than local land use planning. For example, the Water Authority must plan its regional water supplies, regional water transmission and other facilities through 2030 in order to provide the infrastructure needed to accommodate the projected population; however, most cities and counties implement general plans with a planning horizon of 10 to 15 years. Thus, disparity between the planning horizon of the Master Plan and relevant general plans, which control local growth of diverse areas throughout the Water Authority's service area, make it difficult, if not impossible, to predict with any certainty how growth will occur through 2030 and what effect, if any, the Master Plan will have on this growth or the physical changes to the environment that may accompany such growth.

It is important to note that the Water Authority supplies water on a regional basis; it does not selectively allocate water supply to individual jurisdictions. The Water Authority is not responsible for determining how much water each city or county receives on a yearly basis – water provided by the Water Authority is available to the entire region. Because land use decisions are made on a jurisdictional rather than a regional basis, it is difficult to predict with any certainty what physical, growth-inducing effects, if any, the Master Plan will have on the San Diego region.

Finally, over the planning horizon of the Master Plan, such factors as changes in international, national, and regional economies, and international migration will have effects on growth in the San Diego region, which are impossible to predict currently.

Due to the disparity between the planning horizon of the Master Plan and the relevant general plans, and the fact that the Water Authority provides water on a regional, rather than jurisdictional, level, and the many external forces that may impact the region over the next 27 years, predictions as to what effect, if any, the Master Plan may have on growth in the San Diego region through 2030 are too speculative to assess in this EIR.

18.3 CUMULATIVE IMPACTS

18.3.1 Introduction

Cumulative impacts are those impacts which by themselves are not significant but, when considered with impacts occurring from other projects in the vicinity would result in a total or cumulative impact. As defined in the CEQA Guidelines, a cumulative impact results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable projects. While an EIR should discuss the "severity and likelihood of occurrence" of cumulative impacts, "the discussion need not provide as great detail" as the discussion of the proposed project's effects but "should be guided by the standards of practicality and reasonableness" (CEQA Guidelines Section 15130). In addition, reasonable mitigation measures should be discussed. However, CEQA acknowledges that "with some projects, the only feasible mitigation for cumulative impacts may involve the adoption of ordinances or regulations rather than the imposition of conditions on a project-by-project basis."

This section examines the program-level cumulative effects that may occur if overall regional development proceeds during the Master Plan implementation timeframe as allowed by existing land use designations and zoning; the San Diego County Comprehensive General Plan, and other service area cities' general plans; adopted HCPs; and other region-wide plans and regulations developed for the protection of water resources, air quality, etc.

In summary, the Proposed Project would be expected to enable the Water Authority to reliably provide water to its member agencies by ensuring an adequate supply is available and that adequate infrastructure is in place to transport and treat the water throughout the service area through 2030.

The cumulative impacts of the Proposed Project are expected to be reduced to a less than significant level through incorporation of standard mitigation measures and additional site specific measures that would be identified during subsequent site-specific CEQA review.

18.3.2 Land Use

Cumulatively significant impacts could result from the Proposed Project and other cumulative development and utility and infrastructure projects throughout the region if these projects are not in conformance with the adopted land use plans, zoning requirements, HCPs/MSCPs, and environmentally sensitive land regulations. In most cases, the projects would be compatible with local plans, and designed and sited to minimize these conflicts and/or inconsistencies. Implementation of mitigation measures identified for specific project actions on a case-by-case basis could reduce potentially significant cumulative impacts to a less than significant level.

18.3.3 Water Resources

The Proposed Project, when considered with other projects in the same watershed, would result in significant cumulative impacts to water quality from increased runoff. Construction projects would result in increased erosion from exposed soil areas, which contributes to sediment-laden runoff into local drainage courses. Erosion can be destructive to the immediate area and sedimentation can clog waterways and downstream wetland and lagoon areas. However, it is assumed that new construction associated with other projects would meet Federal, State, and local permit requirements in a similar manner as required for the Proposed Project, and would include mitigation measures similar to those identified in Section 5, Water Resources. As such, the potential cumulative impacts are considered to be less than significant.

18.3.4 Biological Resources

Implementation of the Proposed Project could result in cumulative impacts to biological resources. Potential impacts include loss of wildlife and plant habitat, disturbance to special-status species, impacts to waters of the U.S. (including wetlands), and fluctuations in salinity levels which may effect marine wildlife resources.

In general, the Proposed Project would involve construction activities along city streets and within residential, industrial, and commercial areas. Therefore, impacts to sensitive biological resources are expected to be minimal.

Impacts to sensitive biological resources are regulated by the USFWS, CDFG, ACOE, and other agencies. Any potential impacts to sensitive biological resources resulting from project development will require consultation with responsible agencies and implementation of mitigation measures. Implementation of these mitigation measures will be required as a condition of project approval; therefore, significant cumulative impacts to biological resources are not expected.

It should also be noted that the preservation of the region's biological resources is being addressed through the implementation of regional habitat plans (MSCP, MHCP, or other HCPs). These plans focus efforts on the region's predominant habitats (Diegan coastal sage scrub,

riparian woodland, southern mixed chaparral, non-native grassland, and southern oak woodland), providing for preservation in large, contiguous areas of habitat in perpetuity. Sensitive resource areas would be managed, restored, and/or revegetated for long-term persistence through implementation of the applicable HCP. The conservation of open space and restoration or enhancement of disturbed habitat provided by implementation of any applicable MSCP, MHCP, and other plan guidelines and mitigation required of projects would also serve to lessen the potential cumulative biological impacts to less than significant.

18.3.5 Traffic and Transportation

Construction activities associated with the Proposed Project facilities would contribute to an overall increase in traffic volumes on the existing and planned roadway network on a localized and temporary basis only. Following construction, the Proposed Project would not contribute to cumulative regional traffic and transportation impacts associated with other projects in the region.

18.3.6 Noise

Noise impacts associated with the Proposed Project would occur primarily during construction and would be short-term in nature. From a long-term operational standpoint, noise from equipment or machinery operation will be mitigated to achieve the necessary noise limits established in the local regulations for noise sensitive locations. Therefore, cumulative noise impacts would be mitigated to a less than significant level.

18.3.7 Air Quality

Construction activities for Proposed Project facilities could result in temporary significant construction-period emissions of criteria air contaminants. Over the long-term, operation of Proposed Project facilities could result in the creation of objectionable odors, omissions from occasional use of emergency back-up generators, and fugitive dust from infrequent vehicle traffic on dirt roads. SDAPCD-approved mitigation measures can reduce these impacts to less than significant for all emissions. All construction and operation activities within the region are required to comply with Federal and State air quality policies.

SDAPCD has permit authority over stationary sources, acts as the primary reviewing agency for environmental documents addressing potential air quality impacts, and develops regulations that must be consistent with, or more stringent than, Federal and State air quality policies. Because all cumulative projects would be subject to required mitigation measures for construction, it is anticipated that construction emissions would not be cumulatively significant.

18.3.8 Utilities and Public Services

The Proposed Project would increase the demand for electric and natural gas utility services. Other anticipated projects would be required to provide for adequate utility service before their approval, and it is not expected that these projects would require more utility service than could be provided through usual procedures. In addition, utility providers would plan ahead and

forecast future utility demands in the region as a whole and expand their capacity to meet future needs and provide adequate levels of service. Therefore, impacts would be less than significant.

The Proposed Project would only affect public services during the construction phase and related impacts would be short-term in nature. Therefore, the cumulative impact is anticipated to be less than significant.

18.3.9 Aesthetics

Development of the Proposed Project would result in cumulative adverse impacts on aesthetic resources in the region. Adverse aesthetic impacts would result from the construction of visible aboveground and partially buried Proposed Project facilities, such as pump stations, treatment plants, FRSs, and various vents, valve enclosures, and other ancillary facilities. In general, the Proposed Project facilities would occur in heavily modified urban and industrial settings or adjacent to existing facilities. Projects located in rural or open space areas create substantial visual contrasts with their settings; however, no other projects are anticipated in the immediate area of the storage facility sites. With the implementation of mitigation measures identified in Section 11, cumulative impacts are anticipated to be less than significant.

18.3.10 Geology and Soils

The entire San Diego region is susceptible to impacts from seismic activity. Although seismic activity can cause damage to substandard construction, new project designs can significantly reduce potential damage. Earthquake-resistant designs employed on new structures minimize the impact to public safety from seismic events to a less than significant level.

Proposed Project facilities and many other projects could be constructed through geologic formations susceptible to slope failure and soil compaction as well as on sites with potential shrink and swell soils, or that feature soils with high erosion potential. Project-specific geotechnical investigations would be necessary as part of the design process to address these geologic issues and impacts. As such, all project facilities throughout the region would be required to utilize standard engineering practices and meet design standards that would reduce the potential for these cumulative geological impacts to a less than significant level.

18.3.11 Cultural Resources

Any loss of cultural resources from the combined Proposed Project facilities and reasonably foreseeable future projects would contribute to cumulatively significant impacts to cultural resources. Cumulative impacts could be reduced to a less than significant level or avoided by mitigation measures identified in Section 13, Cultural Resources, along with any mitigation outlined during project-specific analysis.

18.3.12 Public Safety and Hazardous Materials

Construction, operation, and maintenance of Proposed Project facilities and other reasonably foreseeable projects in the region could increase the potential for wildfires in the service area. This potential for project-related fire hazards could be mitigated to a less than significant level.

through adoption of appropriate mitigation measures (e.g., development and implementation of Fire Prevention Programs or ERPs for each project, as necessary, in consultation with local fire protection services).

Similarly, construction and operation of Proposed Project facilities and other reasonably foreseeable future projects in the region could result in the exposure of workers or the public to hazardous materials due to disturbance of contaminated sites, or the unintentional release or spill of hazardous materials. These impacts would be reduced to a less than significant level through the implementation of mitigation measures, including the thorough investigation of potential project sites prior to construction; clean up of known contaminated sites; use of proper personal protective equipment if contamination were encountered; proper use, handling, and storage of hazardous materials to prevent spills; and adequate ERPs that would be implemented in the event of a release or spill.

Critical infrastructure facilities associated with the Proposed Project or other infrastructure projects in the region would be vulnerable to acts of vandalism or sabotage. The sabotage of a critical facility could result in significant adverse impacts to public safety. The implementation of appropriate security-related mitigation measures, such as fencing, secured entryways and alarms and surveillance, would reduce the potential significance of this impact to a less than significant level.

18.3.13 Paleontological Resources

The Proposed Project and other regional projects would result in disturbance of geologic formations with moderate to high paleontological resource potential throughout the region. At the site-specific level, paleontological surveys would be required to determine the resource value for impacted areas. Monitoring by a qualified paleontological monitor would also be a site-specific requirement in all those areas where any grading would occur in formations of moderate to high resource potential and would reduce any cumulative impacts to regional paleontological resources to a less than significant level.

18.3.14 Agricultural Resources

The Proposed Project could result in the conversion of sensitive farmland. In general, the Proposed Project facilities would occur in heavily modified urban and industrial settings or adjacent to existing facilities. As a result, impacts to agricultural resources are expected to be minimal. Therefore, with the implementation of mitigation measures identified for the Proposed Project, and if other projects implement similar mitigation measures, potential cumulative impacts to agricultural resources are anticipated to be less than significant.

18.3.15 Recreation

The Proposed Project facilities and other reasonably foreseeable projects could have cumulative significant adverse impacts on recreational resources in the region. However, with the implementation of appropriate mitigation measures, such as relocation of displaced facilities or restoration of disturbed facilities, cumulative impacts to recreational resources would be less than significant.

18.4 EFFECTS FOUND NOT TO BE SIGNIFICANT

Section 15128 of the CEQA Guidelines requires an EIR to contain a statement briefly indicating the reasons that various potentially significant effects of a project were not discussed in detail in the EIR. This Program EIR contains an analysis of the potentially significant environmental effects associated with the Proposed Project. The following issues are addressed in this document: land use, water resources, biological resources, traffic and transportation, noise, air quality, utilities and public services, aesthetics, geology and soils, cultural resources, public safety and hazardous materials, paleontological resources, agricultural resources, and recreation. In addition, each resource section (Sections 4 through 17) also identifies potential effects of the Proposed Project that were determined not to be significant.

18.5 UNAVOIDABLE ADVERSE IMPACTS

No unavoidable potentially significant adverse program-level impacts were identified for the Proposed Project.