# Chapter 5 Growth-Inducing Effects

This chapter provides an evaluation of the potential local and statewide growth-inducing effects of the proposed action. MID's budget for allocating banking capacity to local M&I users under all of the proposed action and alternatives is up to 10,000 af per year, while MID could recover up to 45,000 af per year for its agricultural users. It is important to note that the WSEP is intended to help offset dry or below normal water years, and water recovery for M&I uses is not expected to happen in wet or above normal years. It is reasonable to assume that there would be a net banking in wet years and a net recovery in dry years. As water year types vary, it is not expected that the WSEP would provide firm, or consistent, water supplies to those using the bank. Rather, the WSEP would provide greater water supply reliability in dry or below normal water year types. It would not increase the total amount of water supply available to any users. Effects are described within the context of an action (Alternatives B, C, and D) versus no action (Alternative A).

Under authority of NEPA, CEQ Regulations require EISs to consider the potential indirect impacts of a proposed action. The indirect effects of an action are those that occur later in time or farther away in distance, but are still reasonably foreseeable, and "may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate" (40 CFR 1508.8[b]).

Evaluation of the growth-inducing effects of the WSEP is based on a qualitative analysis of the direct effects of constructing and operating the WSEP, and the indirect effects that could result from the additional water banking capacity. It is assumed that water banked and used by MID would be used for agricultural purposes, and no growth-inducement would be linked to this additional banking capacity. As such, this analysis is based on the 10,000 af/year of banking capacity potential for M&I as provided by the WSEP and the direct effects of construction. Specifically, this evaluation of potential growth-inducing impacts addresses whether the project would directly or indirectly: foster economic, population, or housing growth; remove obstacles to growth; increase population growth that would tax community service facilities; or encourage or facilitate other activities that cause significant environmental effects.

## 5.1 Affected Environment

Development at the local level is guided by many considerations, among them the availability of the water supply. Cities and counties regulate land uses by adopting general plans, zoning, and measures for the control of local growth. However, economic forces largely govern the rate and location of growth. In northern

California, for example, the strong economy in the San Francisco Bay Area stimulated growth throughout the southern Sacramento and northern San Joaquin Valleys in the 1990s.

Water supply by itself does not drive growth. This is exemplified by the low growth rates experienced in Humboldt and Siskiyou Counties. These areas have substantial water supplies, but their growth rates during the 1990s were substantially less than the statewide average (California Department of Finance 2008).

At the same time, economic and population growth depend on adequate water supplies. A wide range of wholesale and retail institutions plan for and manage water supply to meet current and future demands. It is conceivable that water banked at Madera Ranch could be used to improve water supply reliability or expand water supplies to users in the San Joaquin Valley and Southern California. However, MID's business plan only allows for the use of 10,000 af/year in support of M&I projects and only within Madera County.

Throughout California, water management decisions are separate and distinct from land use management decisions, and such decisions are made by completely different institutions. City and county governments make specific land use decisions for their jurisdictional areas and have adopted general plans to guide growth and development. By contrast, there is a wide array of public and private water purveyors, special districts, and other institutions with water supply roles. These agencies operate largely independently of city and county governments to plan for water needs, secure water, and deliver that water to customers.

### 5.1.1 Sources of Information

The County's General Plan and California Department of Finance data sets were consulted for information related to current and future land use, population statistics, and planned growth rates for Madera County. In addition, both the GFWD and MID have developed groundwater management plans to evaluate the availability of groundwater resources to support current and future demands. The City of Madera has finalized its urban water management plan prepared pursuant to state law that documents how the available water supply will accommodate planned growth. Additionally, both the County and the City of Madera were consulted to determine whether projects approved and in process would be facilitated through the availability of M&I banking capacity at Madera Ranch.

The documents discussed above provided information and data related to statewide growth and population forecasts. In addition, the *California Water Plan* (California Department of Water Resources 2005), the *Critical Water Shortage Contingency Plan* (California Department of Water Resources 2000a), *Preparing for California's Next Drought*, *DWR Drought Report* (California Department of Water Resources 2000b), and *Integrated Regional Water Management Plan*

(Madera County 2008) were consulted for data on statewide and local water needs, growth, and current and anticipated water shortages.

### 5.1.2 Setting

#### *Growth Projections*

California is a rapidly growing state. California's population is estimated to have increased by approximately 4.8 million people for a total of 38 million people in 2008. The population is expected to rise to nearly 50 million by 2025 (U.S. Census Bureau 2001).

Locally, the population of Madera County is estimated to have increased from 123,109 in 1991 to 146,513 in 2007, an increase of approximately 19% (U.S. Census Bureau 2008). The population of Madera County is estimated to increase to 212,874 by 2020 (California Department of Finance 2007).

The *California State Water Plan* estimates that the state currently incurs a water supply shortage of 1.6 maf in an average year (about 1.5 maf of this represents ongoing groundwater overdraft) and 5.1 maf in drought years (California Department of Water Resources 1998, Colorado River Water QSA PEIR). DWR projects that by 2020, if new water management actions are not undertaken, the state will face shortages of 2.4 maf in an average or normal water year, and 6.2 maf during times of drought. Areas of California that rely on water from the Delta for all or a portion of their supplies are expected to experience ongoing shortages and reliability problems even in normal years (California Department of Water Resources 1998; Jones & Stokes 2001).

Water use in Madera County in 2006 was 1.2 maf, with approximately 97% (1.17 maf) applied for agricultural purposes. Within the valley floor area of Madera County, groundwater accounted for approximately 75% of the total agricultural water use. Additionally, all urban and rural water is supplied by groundwater sources. The total county water demand is expected to be about 1.3 maf/year by 2030, an increase of about 100,000 af of water, most of which is attributed to growing urban and rural demand. Current overdraft is approximately 100,000 af and is expected to rise to 155,000 af if no action is taken in the county. (Madera County 2008.)

#### *Current and Planned Development*

Development has proceeded in Madera County despite the existing overdraft condition. To date, the presence or absence of available groundwater has not been an obstacle to growth. With the preparation of the *Integrated Regional Water Management Plan* the County may revisit its development approval conditions

and is looking seriously at a variety of options to resolve the overdraft problem. One option that may be considered is the use of Madera Ranch.

Several residential and commercial developments are currently approved or in a discretionary permit process with the County. These projects have existing water supply rights that could utilize the water bank M&I allocation (Table 5-1). Within Madera County, there is already 7,455 af/year of existing water supply for planned development that could potentially be banked under the M&I allocation of the alternatives. An additional 12,000 af/year of existing water supply that could potentially utilize the bank for future development projects has also been identified. Thus, 19,455 af/year of existing, known water supply identified for use in future land use development have been identified within Madera County. This represents almost double the amount of M&I shares (with one share equaling one acre-foot of water) available at Madera Ranch under the proposed action and alternatives.

Additionally, many potential development projects are also identified in the *Integrated Regional Water Management Plan*; these are more speculative and water supplies for these potential projects have not yet been identified. The source of water for these projects would likely need to be groundwater or out-of-county sources. All of these projects will proceed only after County approvals and after obtaining a firm water supply, which is in no way dependent on the WSEP.

**Table 5-1.** Known Proposed Future Development in Madera County, Water Supply, and Potential Participants

| Development | Total Project Acreage | Residential Units | Commercial/ Industrial Acreage | Status | Total Acre-Feet per Year (if known) | Water Supply Secured Elsewhere | Water Supply Source | Back up Dry Year Storage Needed | Potential Water Bank Participant | Potential Banked at Madera Ranch (Acre-Feet) |
|---|---|---|---|---|---|---|---|---|---|---|
| Gateway Village | 2,392 | 6,455 | 185.6 | Approved | 6,374 | Yes | Surface Water Groundwater | Yes | Yes | 2,170 |
| North Fork Village—North | 2,238 | 2,522 | 82.3 | Final EIR Pending | 1,355 | Yes | Unknown | Possibly | Unknown | 1,355 |
| Gunner Ranch West | 1,135 | 3,014 | 209 | Plan Pending | – | ? | Unknown | Unknown | Unknown | |
| North Fork Village—Central Green | 793 | 1,646 | n/a | Supplemental EIR Pending | – | ? | Unknown | Unknown | Unlikely | |
| Tesoro Viejo | 1,574 | 4,600 | n/a | Draft EIR Pending | 4,810 | Yes | Surface Water & Reclaimed | Possibly | Yes | 3,930 |
| Jim Cobb | 350 | 350 | 60 | Application Pending | – | ? | Unknown | Unknown | Unlikely | |
| Dunmore Homes | 368 | 2,064 | n/a | Application Pending | – | ? | Unknown | Unknown | Unknown | |
| City of Madera—Existing Homes | n/a | n/a | n/a | Existing Homes | – | ? | Groundwater | Unknown | Yes | 2,000 |
| City of Madera—New Growth | 500–1,000 | 300–400 | 50 | Various Applications | – | | Unknown | Unknown | Yes | 1,000 |
| Developer A | 1,000–1,500 | 600 | Unknown | Various Applications | 1,000–1,200 | Yes | Transfers | Yes | Yes | 1,000 |
| Developer B | 500–1,000 | 500–1,000 | Unknown | Application Pending | 500–1,000 | Yes | Transfers | Yes | Yes | 1,000 |
| Developer C | 3,000 | 7,000 | Unknown | Application Pending | 7,000 | Yes | Transfers | Yes | Yes | 7,000 |
| **Total** | | | | | | | | | | **19,455** |

Notes: Developers A–C are not named because final agreements have not been signed.

### 5.1.3 Regulatory Context

During its NEPA compliance actions, Reclamation endeavors to avoid encroaching on State and local governments' primary jurisdiction over local planning, zoning, and other such issues associated with the concept of "growth." Such respect for State and local primacy must occur along with Reclamation's compliance with Federal laws, including NEPA. It should be recognized that there will be occasions when the provision of Federal project water may be the cause of urban growth (the *but for* issue). However, even if there is a causal relationship, the U.S. Supreme Court determined in *Department of Transportation v Public Citizen, June 7, 2004* that a Federal agency need not consider the environmental effects of the associated nonfederal action (growth and development) in its environmental assessments under NEPA if the Federal agency has no ability (Jurisdiction or control) to prevent the nonfederal action and associated effects from occurring. Since Reclamation usually has no jurisdiction and control over urban development, it need not address the consequences of this development in its environmental analysis.

#### *State Regulations*

*Relationship to Senate Bill 610 and Senate Bill 221, 2001*. Land use planning agencies in California plan growth based on a number of different factors, many unrelated to available water supplies, including economic factors and population dynamics. Also, according to California law, water suppliers are required to serve the needs of users within their service areas (e.g., *Swanson v. Marin Municipal Water Dist*. (1976) 56 Cal.App.3d 512, 524 [water district has a "continuing obligation to exert every reasonable effort to augment its available water supply in order to meet increasing demands"]).

The coordination between water supply and land use planning was strengthened in 2001 by the passage of SB 610 and SB 221, which require cities and counties to obtain assessments of the availability of water to supply new developments over a certain size and to obtain assurance from water suppliers that sufficient water is available before approving these new developments. The combined effect of SB 610 and SB 221 is to impose upon cities and counties the ultimate responsibility for determining the sufficiency and availability of water as part of their environmental review and approval processes. In addition, a recent court case (*Save Our Peninsula Committee v. Monterey County Board of Supervisors* [2001] 87 Cal.App.4th 99) discussed how water supply sufficiency and the impacts of the proposed project on limited local supply sources were the key factors in deciding the adequacy of an EIR. Water supply availability in that case was also clearly a determining factor in whether development was allowable.

SB 610 and SB 221 require that water supply agencies inform land use jurisdictions regarding the availability of water supplies, type of infrastructure necessary to deliver the water, and impact of new development on supply reliability. SB 610 allows for local land use agencies to approve development, despite a water agency's conclusion that the supplier's reliability levels would be compromised. Specifically, a water supplier could report to the local land use agency that water supplies are insufficient, and development could still proceed regardless, should the land use authority decide to procure alternate supplies or, in the case of SB 610, adopt a statement of overriding considerations with respect to significant water supply impacts. Further, while SB 610 and SB 221 do attempt to increase the consideration of water supply factors in development decision making, many proposed projects are not of a large enough scale to trigger the requirement to prepare a water supply assessment pursuant to SB 610 (i.e., 500 or more residences, nonresidential uses that would supply more than 1,000 persons, or mixed-use projects that would have a water demand equivalent to the demand of 500 residential units).

## 5.2 Impact Assessment

### 5.2.1 Methods

The potential for the WSEP to remove an obstacle to growth or otherwise induce growth was determined based on analysis of how construction activity and the increased water supply reliability for M&I uses would affect projected growth rates.

### 5.2.2 Analysis of Effects

The effect of MID water banking at Madera Ranch would be to increase the reliability and certainty of water supplies for current users with existing water rights or entitlements. The proposed action and alternatives do not include an application to appropriate water, would not involve water transfers, and would not create new water supplies that could be dedicated to urban development.

As discussed in the Socioeconomics and Environmental Justice sections of Chapter 4, the Proposed Action and alternatives are not anticipated to result in additional employment or demand for residential development within Madera County and therefore would not induce growth through increased economic activity. The Proposed Action and alternatives could provide up to 10,000 af/year of banking capacity at Madera Ranch for local M&I uses.

### Effect GI-1: Inducement of Growth due to Municipal and Industrial Participation in Water Bank

Between the currently identified planned projects and the current overdraft situation, the full 10,000 af/year of non-MID M&I banking capacity is very likely, if not certain, to be fully utilized. Only participants with an existing water supply would be allowed to participate in the Bank. The banking of this water would not change the overall amount of water available to these M&I users, but does improve the reliability of the supply since the banking capacity provided by the WSEP helps M&I users manage their supplies. This firm supply would be applied to the planned growth regardless of implementation of the WSEP. The WSEP would therefore not cause growth, but removes an obstacle to growth because the increased reliability could make development easier or more attractive.

This growth could result in the conversion of agricultural and other open land to urban uses that may adversely affect agricultural and biological resources (including special-status species and other sensitive resources) at those locations subject to such conversion. In addition, this conversion could lead to changes in stormwater runoff quantity and quality, and impacts on cultural resources. Increases in population could lead to impacts on air and water quality, traffic and noise conditions, and increases in the demand for such public services as schools, fire, police, sewer, solid waste disposal, and electrical and gas utilities. In addition, the expansion of such services could result in additional adverse impacts. Local jurisdictions could impose feasible mitigation measures on development that would reduce or eliminate these impacts, but as the location of any new growth cannot reasonably be predicted, estimating the potential for this would also be remote and speculative.

It would be extremely speculative to identify specific areas where growth could occur or the indirect effects on specific community service facilities. Overall, a small potential exists that implementation of the WSEP could have some effect on growth and community facilities, but these effects, if they occur, likely would be extremely small, especially compared to other social and economic variables that can influence growth and services.

Mitigation of these impacts, should they occur, would be the responsibility of the local jurisdictions in which the growth would occur, not Reclamation. The impacts of this growth, if any, would be (and in some cases have been) analyzed either in general plan EIRs for the local jurisdictions or in project-level CEQA compliance documents. Mitigation measures could include locating the growth in areas where sensitive resources are absent, minimizing the loss of these resources, or replacing any loss.

# Chapter 6 Preparers

## 6.1 Bureau of Reclamation

1243 N Street
Fresno, CA 93721

| Name | Expertise | Role |
|---|---|---|
| Judi Tapia | Natural Resources Specialist | Reviewer |
| Patti Clinton | Natural Resources Specialist | Project Manager, Reviewer |
| Shauna McDonald | Wildlife Biologist | Reviewer |
| Jonathan Connolly | Archeologist | Reviewer |

## 6.2 Stoel Rives LLP

980 Ninth St., Suite 1900
Sacramento, CA 95814

| Name | Expertise | Role |
|---|---|---|
| Barbara Brenner | Legal Review | Attorney |

## 6.3 ICF Jones & Stokes

630 K Street, Suite 400
Sacramento, CA 95814

| Name | Expertise | Role |
|---|---|---|
| **Project Management Team** | | |
| Brad Norton | NEPA Compliance, Biologist | Project Director, Biological Resources |
| Jennifer Pierre | NEPA Compliance | Project Manager, Introduction, Alternatives |
| **Technical Team** | | |
| Kim Marcotte | NEPA Compliance | Aesthetics, Agricultural Resources, Land Use |
| Shannon Hatcher | Air and Noise Specialist | Air Quality, Noise, Climate Change |

| Name | Expertise | Role |
|---|---|---|
| Dave Buehler | Noise Specialist | Noise |
| Ed West | Wildlife Biologist | Biological Resources |
| Rob Preston | Botanist | Biological Resources |
| Gabriel Roark | Prehistoric Archaeologist | Cultural Resources |
| Christiaan Havelaar | Archaeologist | Cultural Resources |
| Joel Butterworth | Soil Scientist | Geology, Seismicity, and Soils |
| Stephanie Bradley | Environmental Specialist | Public Health and Safety, Public Services and Utilities, Traffic and Circulation |
| Nate Martin | Hydrologist | Water Quality, Water Resources and Supply |
| Sacha Selim | GIS Specialist, graphic design | Geographic Information Systems |
| Becky Crosswhite | GIS Specialist | Geographic Information Systems |
| Darle Tilly | Technical Editor and Writer | Lead Technical Editor |
| Carol-Anne Hicks | Word Processor | Publications Specialist |

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