



THE RÔLE OF LAND TENURE IN REGIONAL DEVELOPMENT: ARVIN AND DINUBA REVISITED

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In both polite conversation and in academic research, land tenure is a subject normally reserved for Third World or “developing” countries. When the concept is brought home, it is most often in reference either to marginal groups—Black tenant farmers in the South, for example; or to historic events, such as the Depression-era displacement of sharecroppers. On rare occasions when the subject is raised to address modern social issues and resource policy decisions, official responses range from agnosticism to knee-jerk denial. This paper is about regional developmental influences of land tenure in California’s breadbasket—the Central Valley—and one of the more recent efforts to keep the subject suppressed.

Tenure and Development: Goldschmidt’s Hypothesis

Modern social science has produced but one line of investigation pertaining to the social consequences of domestic land tenure patterns, a line related to the trend toward concentration in U.S. agriculture. Between 1940 and 1944, Walter R. Goldschmidt conducted two studies of the influences of land tenure on social conditions and commercial

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development in three California farm towns. In the first study, an ethnographic/historical investigation of Wasco, a town surrounded by large-scale agriculture, Goldschmidt found strong social polarization between farmworkers and non-farmworkers, and a developmental level stifled by the limited buying power of the larger but poorer farmworker population. The second study sought to test these relationships by comparing Arvin and Dinuba, a pair of farm towns with differing land tenure patterns (Figure 1.)

Goldschmidt constructed the Arvin–Dinuba study to control for as many variables as possible. The two towns were comparable in terms of their resource bases and population size; they produced equivalent dollar values of agricultural products and were both significantly dependent on hired farm labor. The major difference between them was the size and operational structure of the farms supporting them. Arvin was surrounded by large-scale, manager-operated farms, while Dinuba was supported primarily by small-scale, family-operated farms. Goldschmidt found that the large-farm town was markedly underdeveloped relative to the small-farm town, which had more than twice as many businesses, schools and parks, churches, social organizations, and civic groups, as well as a volume of retail trade three times greater than the large-farm town. These differences were directly traceable to the different proportions of farm operators and farm laborers produced by the different patterns of farm scale and tenure.

Critiques: Old and New

Political opposition to the second study arose before it was completed in 1944. The Arvin–Dinuba study was conducted as part of the original feasibility investigations for the federal Central Valley Project (CVP), which was subject to the 160-acre limitation and residency provisions of U.S. reclamation law. Large landowners were trying to get the CVP exempted from these provisions.¹ The Arvin–Dinuba

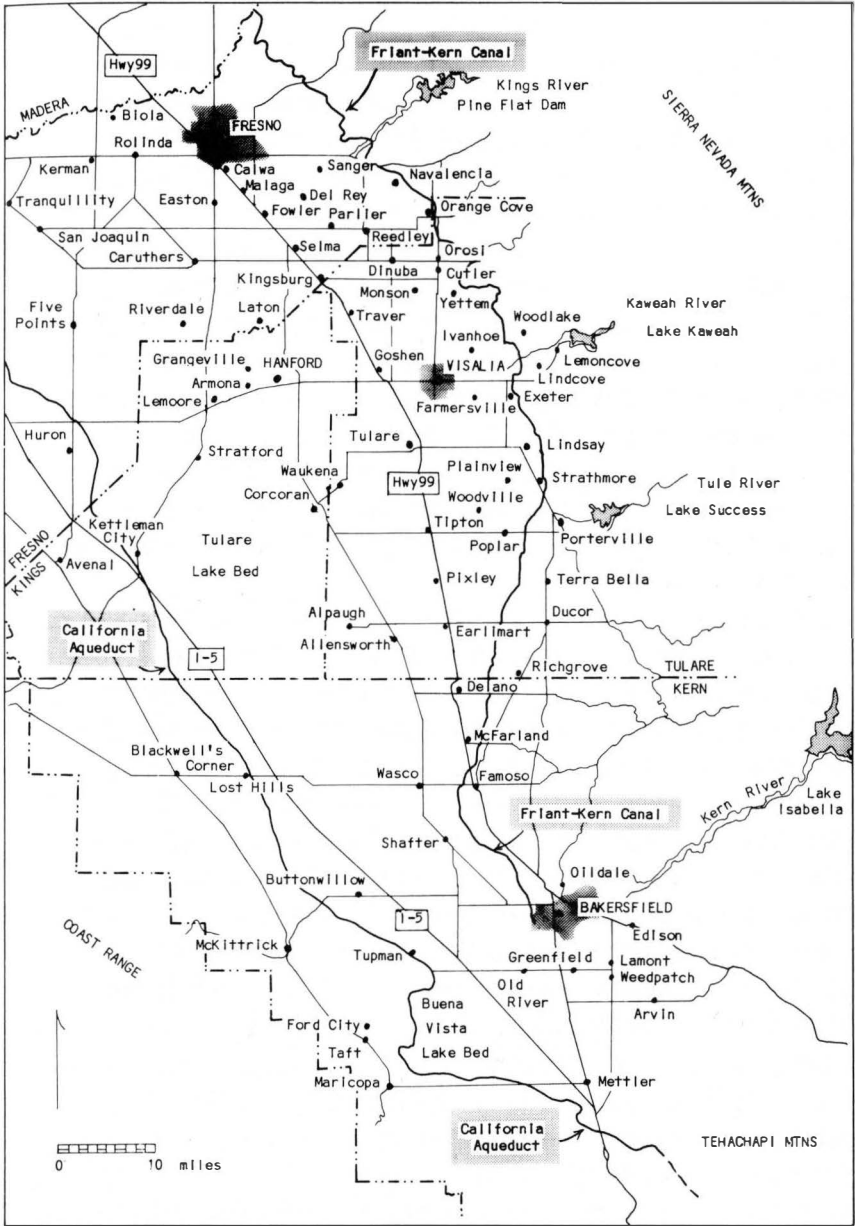


FIGURE 1. *Modern Communities of the Upper San Joaquin Valley.*

study was intended to determine whether large or small farms made a social difference. During the study, proponents of large-scale agriculture worked with newspapers and radio stations to interfere with data collection by encouraging townspeople to refuse to be interviewed. Once it was finished, political pressure on the Bureau of Agricultural Economics, the agency under which the study was conducted, prevented it from being published. Additionally, that same pressure not only prevented the Bureau from undertaking further social research (including a planned project to examine a large sample of Central Valley communities for land tenure effects), but also was influential in the subsequent demise of the agency.² Despite this onslaught—or perhaps because of it—Goldschmidt's research stands as the primary testimony to both the social impacts of agricultural scale and the implications of federal water policy for rural communities.

Recent criticism of the Arvin–Dinuba study has grown more academic in form, though not significantly in content, and continues to be generated primarily to deflect public pressure for enforcement of reclamation law.³ Much of this criticism also reflects a misunderstanding of both the nature of social science and the scope of Goldschmidt's research. Thus far, the only scientifically valid criticism made of Goldschmidt's study is that the relationship he posited cannot be extrapolated to all communities from a two-community case study. Fortunately, studies at the statistical level comparable to Goldschmidt's proposed "second phase" have tested the hypothesis that California's large-scale, farm-worker-intensive farms produce poorer communities; and their findings support Goldschmidt's thesis.⁴ Invalid critiques continue to be generated, however, by treating the Arvin–Dinuba study as if it were an input-output experiment, which ignores or misses entirely the ethnographic model of community development and the rôle of land tenure that it provides.

Hayes and Olmstead's 1984 paper, "Farm Size and Community Quality: Arvin and Dinuba Revisited,"⁵ is a case in point. It claims to show that Arvin and Dinuba were not as comparable as Goldschmidt portrayed them, thus invalidating the findings of the study. Four of their five points are specious and seem intended to mislead.⁶ The fifth point, however, raises interesting questions about the developmental influences of large, exogamous, corporate forces on local and regional development, essentially suggesting (but not investigating) an alternative hypothesis to the influences of land tenure. Had the Hayes and Olmstead paper been anything more than yet another attempt to discount the Arvin-Dinuba study, it might have made some contribution to our knowledge. The purpose of this paper is to investigate the alternative hypothesis suggested by Hayes and Olmstead and to evaluate its merit.

Alternative Hypothesis: Southern Pacific

The valid question which Hayes and Olmstead raise concerns the developmental impetus of the Southern Pacific Railroad (SP), which actually initiated towns and promoted settlement along its routes throughout California and elsewhere. Hayes and Olmstead note that SP platted Dinuba, but not Arvin, and that the two towns differed in terms of their railroad service:

Goldschmidt fails to note that Dinuba's early development was tied to the promotional schemes of the Southern Pacific Railroad. When the Southern Pacific built its second trunk line through the valley in the 1880's, it spaced depots at uniform intervals. The railroad then transferred the land around these stations to the Pacific Improvement Company, a subsidiary designed to encourage community development. This firm platted towns centering on the stations and actively promoted immigration. Dinuba was the first of these planned communities [Preston, pp. 146-147]. There was no comparable railroad sponsorship for Arvin. From its start as a depot, Dinuba had far better transport facilities than Arvin. Dinuba was a main line regular passenger stop until the early 1940's. During its forma-

tive years, as many as seven passenger trains a day stopped there . . . By contrast, Arvin was on a spur line that did not carry passengers.⁷

Underlying this paragraph is a basic and hidden community development paradigm: that rural development is dependent upon urban-based capital flowing into the region. In effect, the Arvin–Dinuba study is a direct challenge to this paradigm, a model of the positive community development effects of indigenous, independent local development. Close examination of the influences of Southern Pacific and other exogamous financial interests on the development of Tulare and Kern Counties provides more support to Goldschmidt's proposition than to Hayes and Olmstead's.

Tulare Development: SP versus Small Farmers

Preston's discussion of Southern Pacific's developmental influence is far more interesting, and precise, than that which Hayes and Olmstead present. Dinuba was not SP's first "planned community," just one of many in a second generation of platted communities. The first generation was located along the initial SP line built between 1872 and 1874, which ran west of Visalia.⁸ One of the major towns platted along this route was Tulare City, designed by SP to compete with Visalia and hopefully to wrest the county seat from it. Modesto, Merced, and Fresno (all eventually county seats) were also promoted by this line. Other small communities platted in Tulare County along this first line included Kingsburg, Traver, Goshen, and Tipton; of these, only Kingsburg currently even approaches Dinuba in size (Dinuba, 15,940; Kingsburg, 9,448). Several communities served by this line were already in existence: Cross Creek (Grandview), Tagus, and Pixley.⁹ Although growth proceeded rapidly in some of these platted communities, it was often at the expense of other communities nearby, which were drained of their populations. Preston also notes that, while the railroad effectively "built" these towns, it could just as quickly destroy

them with its actions, as was the case when it moved the railroad shops and roundhouse from Tulare City to Bakersfield, bringing business in Tulare City "to a standstill."¹⁰

During the late 1870's, development of surface irrigation works and more intensive, smaller-scale agriculture began to challenge the railroad's stranglehold on the development of the Basin. The Tulare Lake Basin was, in fact, the site of the first cooperative efforts to divert Central Valley streams for irrigation. These began in 1864 with the Cooperative People's Ditch, followed by the Lower Kings River Ditch (Lemoore Canal) and People's Ditch in 1872, and the Last Chance Ditch in 1873 (Figure 2). Private companies were also formed, such as the '76 Land and Water Company, the predecessor of the Alta Irrigation District which currently serves Dinuba. These companies sometimes promoted agricultural colonies, settlements of small (ten- to forty-acre) parcels to be served by the irrigation works. This irrigation development not only supported, but also required the development of small-scale, intensified agriculture (a combination of orchards, grain, and alfalfa) to make it pay.

Indeed, agricultural development arising from these irrigation works provided a principle stimulus for the laying of the second Southern Pacific line:

Expanded settlement and rising productivity brought a demand for new lines of communication. *In response to the spread of orchards along the eastern flank of the basin* and to the threat of a competing line in the area, the Southern Pacific built a second trunk line parallel to the original tracks. Completed in 1888, it ran from Fresno to Famosa and nearly duplicated the route of the old Stockton-Los Angeles Road.¹¹ (Emphasis added)

Along the second line, new railroad towns of standard design were platted at Dinuba, Monson, Exeter, and Lindsay; stations (but not towns) were established at Taurus, Kaweah Station, Terra Bella, and Orris. At Porterville (1888) and Plano (1889), standard plats were established adjacent to the existing towns, which were drained of both their func-

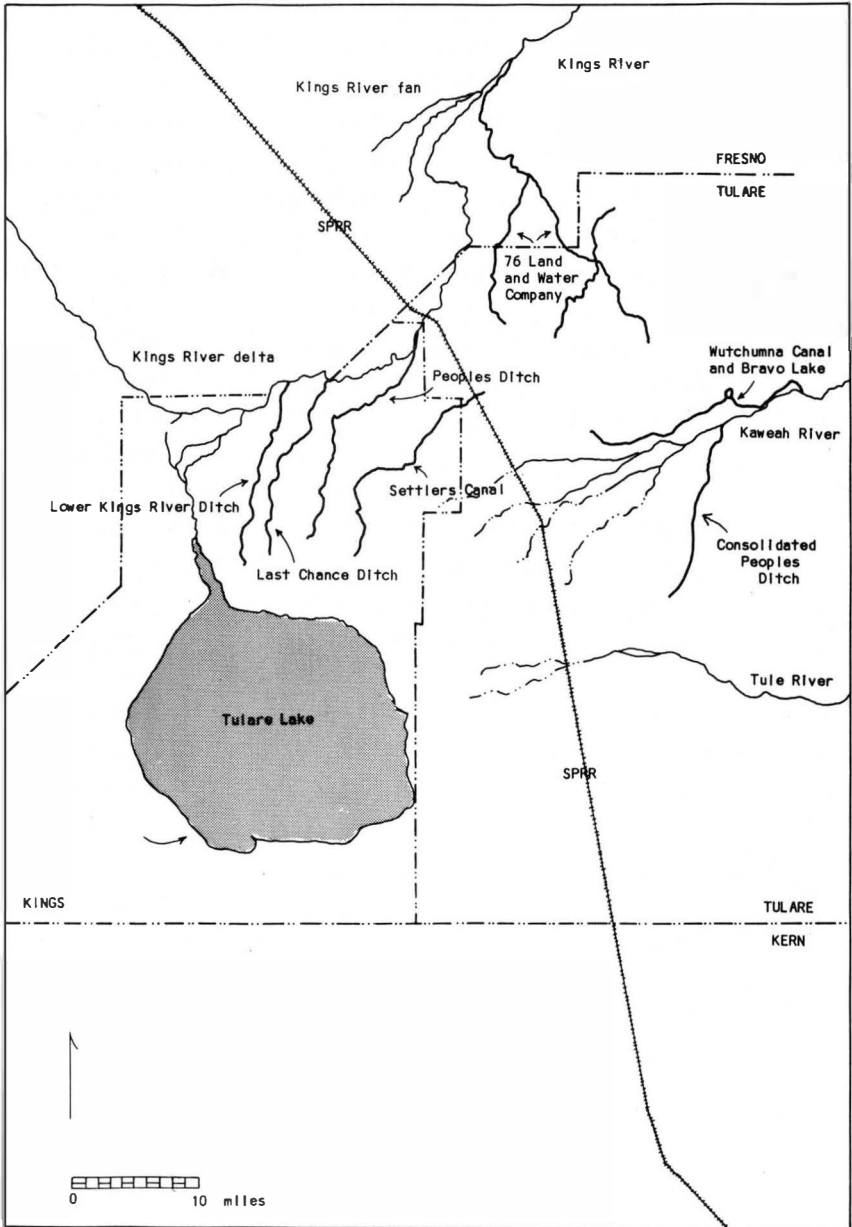


FIGURE 2. *Approximate Locations of early canals, Tulare and Kings Counties, 1870's (from Preston, 1981).*

tions and populations; SP subdivisions at Taurusa, Orris, and Terra Bella were unsuccessful. Independently of Southern Pacific's platting projects, community development also occurred in other parts of the region—at Poplar, Ducor, Orosi, and Lemon Cove, for example. Smaller communities, some of which emerged as shipping centers, included Hunscker, Bellville, Townsend, Cramer, Limekiln, Tagus, Yokohl, Frazier, Camp Badger, Cottage, Tokay, Auckland, and Milo (Figure 3).

It is certain that the presence of the railroad for shipping was a major stimulus to agricultural development in the Central Valley as a whole, but it is equally clear that not all of the railroad's community development impacts were positive. While the success of the railroad towns did not kill the larger independent towns, it certainly retarded their growth. Even more importantly for this discussion, promotion of the railroad towns along the second line severely eroded the economic position of those along the first.¹² The present-day existence of communities founded independently of Southern Pacific's promotion, such as Visalia, suggests that platting was not necessary for the development of communities in the Tulare Lake Basin. The rapid decline of some towns platted by SP demonstrates that it also was not sufficient.

The more important determinant of community viability was the development of small farms, even in those towns platted by Southern Pacific:

A new kind of settlement venture—the agricultural colony—arose as an outgrowth of railroad access and intensified farming in the basin. Large landholders and speculators began to subdivide tracts as large as 5,000 acres into small, ten- to forty-acre farms. They installed irrigation systems and advertised for settlers, often platting a central town as well . . . Some agricultural colonies failed to endure because of locational disadvantages or bad management, yet others flourished. *The most successful colonies served as foundations for the development of substantial communities* such as were soon found around Dinuba

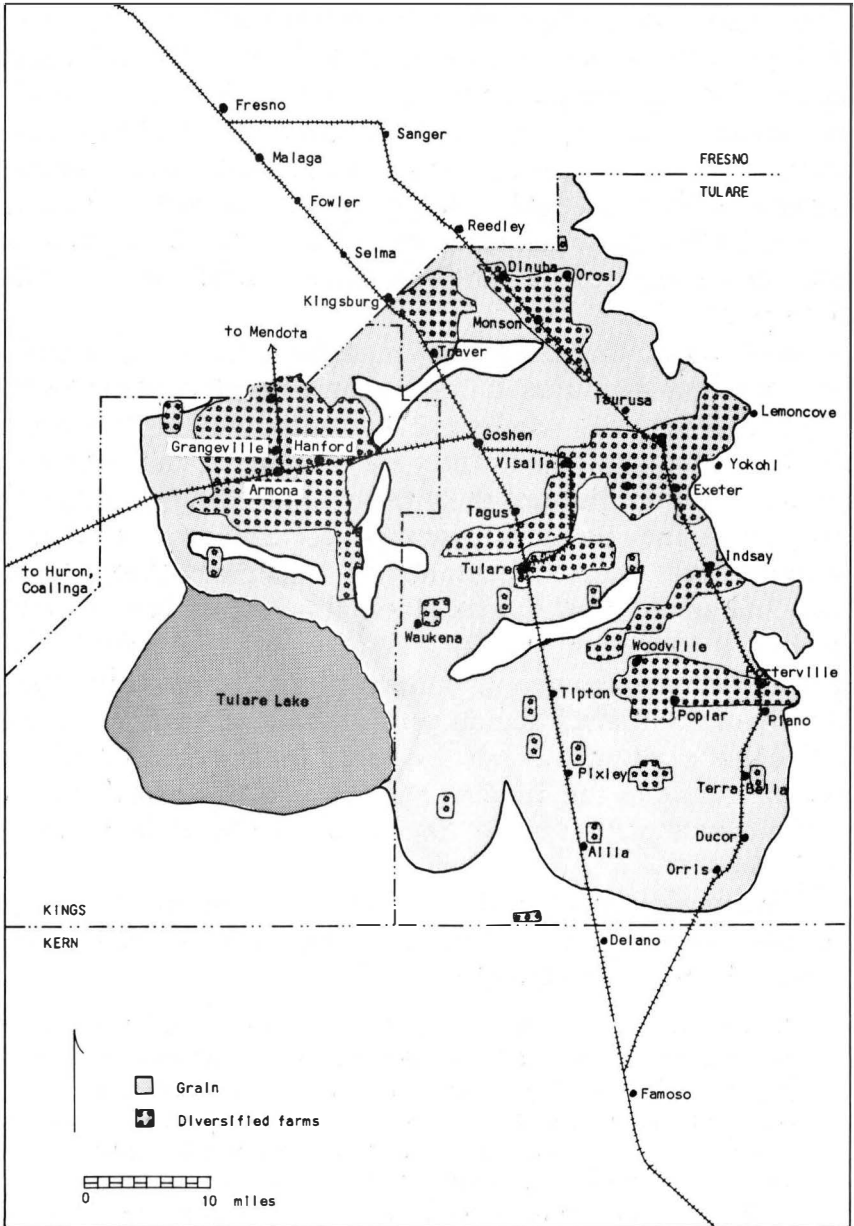


FIGURE 3. *Approximate locations of agricultural development, settlements, and railroads in Kings and Tulare Counties, 1894 (from Preston, 1981).*

and Waukena; densely settled, well-irrigated districts with closely spaced farmsteads. As such they represented an entirely new phenomenon in basin settlement. Often, though, the colony parcels were purchased by adjacent homesteaders or by speculators and so were never developed as independent farms.¹³ (Emphasis added)

In the case of Dinuba, it is clear that the town platting operations of SP contributed to its development. More importantly, however, it should be stressed that the prior development of small-scale, intensive, irrigated agriculture was the principal factor which prompted Southern Pacific's involvement in Dinuba in the first place. The developmental history of Tulare County shows that, where small farms did not develop, SP's community development operations were not sufficient to provide sustained growth of communities.

The Basin's developmental history also shows that the areas where SP was granted public land to subsidize construction are more sparsely settled and less developed than those areas in which public lands were initially open to settlers in their entirety.¹⁴ It is important to note that Southern Pacific was then—and still is today—one of the largest land owners in California, despite laws requiring the resale of railroad grant lands to settlers within three years of the grant.¹⁵ The effect of railroad land grants on rural development is seen more clearly in Kern County.

Kern Development: SP and Large Landowners

There are, of course, other questions relevant to Hayes and Olmstead's hypothesis regarding the developmental rôle of Southern Pacific. Why did the company fail to plat a town at or near Arvin? Why, instead of continuing south over already established routes, did SP bend its line eastward at Bakersfield, taking a longer path through Tehachapi Pass to Los Angeles? Pushing the developmental question further, why was Arvin settled so long after the initiation of agriculture in the region? Examination of land ownership

patterns and the development of irrigation in Kern County provides insight to these questions.

Early Patterns. Although Arvin's location in the south-eastern corner of the Kern River basin makes it appear to be a developmental backwater, the area was traversed in the 1770's by the first Spanish explorers skirting the swampy lands of the Kern River delta¹⁶ (Figure 4). In 1850, more than a decade before the Southern Pacific set its sights on the San Joaquin Valley, the Los Angeles-Stockton Road ran along the east side, from Los Angeles and San Fernando through Tejon Canyon to Stockton, passing within three miles of the present site of Arvin.¹⁷ In 1858 the Butterfield Overland Mail ran a stage route over the Los Angeles-Stockton road, passing through Sinks of the Tejon, no more than five miles from the present site of Arvin. In 1859 the stage station at Sinks of Tejon became further established when the post office was moved there from the Sebastian Indian Reservation.¹⁸

Alternative Routes. Despite the early development and longstanding use of the Los Angeles-Stockton road, Southern Pacific chose instead a longer route bending east from Bakersfield through Tehachapi Canyon into the Mojave, and from there to Los Angeles. One Kern County historian¹⁹ provides three reasons for this choice: first, the gradients in Tehachapi Canyon were deemed more favorable by civil engineers in early reconnaissances; second, Kansas Pacific's exploration of Tehachapi Canyon for its west-bound route to San Diego and San Francisco directed attention toward that pass (although its line was never built); and, finally, the possibility of capturing some of the trade with mining areas on the east side of the Sierra provided still more incentive.

While all of these were reasons in favor of the Tehachapi route, a fourth reason—implicit but not analyzed—provided an argument against the Tejon route: namely, the existence and size of landholdings there. During the previous century, a primary means of subsidizing a railroad's development was to grant alternate sections of public lands extending

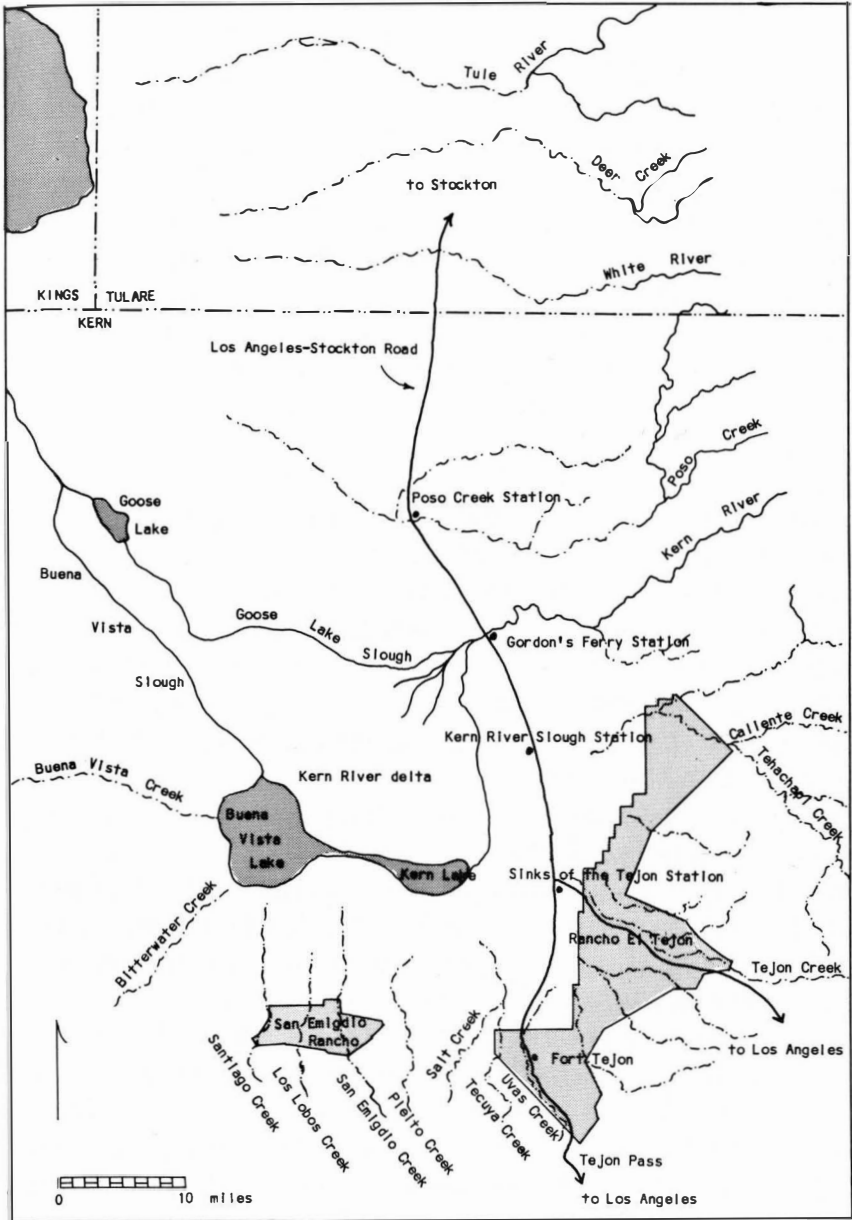


FIGURE 4. Map of early features, Kern County circa 1860 (after Boyd, 1972).

twenty miles in each direction along the course of its route. In Kern County, all of the lands in the foothills region, from the west side of the valley south of Buena Vista Lake, to Tehachapi Canyon at the northeast corner, were parts of Mexican land grants, the titles to which had been cleared by 1863. Thus by 1870, when the route was being determined, the only southern pass not already in private ownership was Tehachapi Canyon. Preston notes that the availability of public land for railroad acquisition and for townsites controlled the final, initial route selection through the Tulare Lake Basin.²⁰ There is little reason to doubt that this policy extended to Kern County as well.

In the Hands of Large Landowners: Kern County

The effects of large holdings were not limited to determining the route of Southern Pacific; they also had a major impact upon the form and location of both agricultural development and settlement patterns. Beginning with Edward F. Beale's questionable acquisition of several Mexican land grants, through public land acquisition schemes of San Francisco-based investors (Livermore and Redington, Miller and Lux, Haggin and Carr, and a few others), to the present day, Kern County development has been determined by only a few major landholders. The means by which this domination took hold is documented in Margaret Zonlight's investigation of the origin of Kern County landholding patterns and their effects upon the development of small farms and the county as a whole.²¹

Settlement. Zonlight describes three areas of initial settlement: Kern Island, Panama, and the Buena Vista Slough region. Kern Island was the site of the first white settlement in 1861; settlement began in earnest in 1869 and had reached fifty families by 1874. Government lands in the Panama district were entirely taken up by 1874, and government lands on Buena Vista Slough were settled between 1873 and 1876. Between 1870 and 1880, Kern County's population rose from

2,925 to 5,601, but the majority of that increase had occurred by 1876. Growth came to a standstill in the last three years of the decade, and probably declined between 1880 and 1886—years during which Fresno and Tulare Counties, by way of contrast, posted respective increases of 89 and 66 percent. Zonlight ascribes Kern's stagnation of growth to the combined effects of (1) loss of land once available for settlement—*i.e.*, public land which became concentrated in a few large private holdings, and (2) complete control of water resources by those same interests.

Land. By the year 1870, three potential sources of land were available for settlement: government lands (approximately 120,000 acres), lands reserved for the railroad grant (about 120,000 acres), and lands already in private ownership (221,117 acres, most of which belonged to a few great land holders). Since neither the railroad lands nor private holdings were ever made available to settlers, the figures cited mean that less than one-fourth of the land in Kern County was available for settlement. After the passage of the Desert Land Act in 1877, "private holders absorbed the remaining valuable lands of the Public Domain almost at a stroke. This closed the door completely on the chance that farmers could settle directly upon government land."²²

Railroad grant land inhibited settlement even on government lands. In 1870, odd-numbered sections of land were withdrawn from the public domain until Southern Pacific could determine its projected route. Southern Pacific did not receive title to these lands until 1876, which retarded settlement in two ways. On the one hand, settlers were reluctant to settle on odd-numbered sections for fear that they would be unable to obtain them from the company, despite assurances to the contrary. On the other, settlers were also reluctant to settle on even-numbered sections, because at a time when most of the land had not been surveyed the burden of proof that land was actually located within those sections was placed on settlers. There was yet another deterrent to

settlement, however. Reserved lands were free of tax assessments; hence the burden of financial support for county improvements fell on settlers and private landholders.²³

Local residents, who were well aware that reservation of lands was hindering the process of settling the county, suggested that the reservation should be revoked:

The lands set apart for the company in this section of the State are among the finest in the world. If they reverted to the Government, farms for homestead and pre-emption entry would be open to thousands of settlers, and the wants of trade would probably compel the building of a road in so short a time that little delay in this indispensable means of communication would be suffered.²⁴

Since "the wants of trade" motivated the laying of the second trunk line in Tulare County, the foregoing proposition was probably correct. Before the end of the decade, journalists were also noting the retarding effects on growth of high fares and excessive freight rates charged by Southern Pacific.²⁵

Had railroad reservation land been returned to the public domain, settlers probably would have paid an order of magnitude less for the land, thus greatly enhancing their survivability.²⁶ Probably more important, had the reserved lands been returned to the public domain, they could have been settled by small farmers. In fact, most Southern Pacific lands which were sold went to the largest landholders en bloc. James Ben Ali Haggin—and his local agent William B. Carr, who had once been a lobbyist for Southern Pacific—acquired the largest percentage of SP lands; over 100,000 acres of these were located north of the Kern River, outside its watershed.

Water. Just as in Tulare County, where the limits of the water resource were felt within two decades after the beginnings of settlement, obvious limits to flows of the Kern River were apparent by the mid 1870's. Unlike Tulare, however, locally-developed systems of minor canals—initiated

by small farmers and capitalists alike—did not lead to colonies or areas settled by family farmers, plans toward that end notwithstanding. Instead, they were co-opted and taken over by the largest of the large in a clash of titans over who would control the Kern River, and thus the development of agriculture in the county.

Cooperative Irrigation. The earliest irrigation efforts in Kern County were undertaken by individuals and groups of settlers. The areas of initial settlement (Kern Island, Panama, and Buena Vista Slough) originally had adequate water, which was distributed in canals dug by the settlers themselves.²⁷ These included the Pioneer Ditch (the canal of the Farmer's Irrigating Company) as well as the Beardsley and McCord ditches, all of which were built with the tools at hand and were lauded as an excellent example of "what may be done with co-operative labor, and [which showed] that where the will exists quite important things may be done without money."²⁸ Later newspaper accounts would characterize these local efforts as failures for want of capital, but Zonlight equates this to an official rationalization for the form of water rights and control over irrigation supplies that emerged:

Although it was true that irrigation posed difficult problems, it was never demonstrated that small farmers were incapable of solving them. They were given neither the time nor sufficient opportunity to put their plans for irrigation into effect. Most irrigation projects undertaken by small farmers came to an abrupt halt in 1874 and 1875. A new phase began and new relationships arose as cooperative irrigation was replaced by corporate irrigation.²⁹

Corporate Irrigation. Rapid transition to corporate irrigation occurred as several San Francisco investors became involved in various land development schemes. Miller and Lux—who illegally acquired huge tracts of land stretching over one hundred miles along the San Joaquin River and fifty miles along the Kern—claimed rights to the flows of

these two rivers through riparian doctrine derived from English common law. In 1877, the California State Agricultural Society noted that Miller and Lux had "commenced over one hundred suits against the farmers who attempted to divert the waters of the Kern River for irrigation purposes."³⁰ The Kern Island Canal, built by Livermore and Redington, exemplifies yet another corporate effort. This canal not only carried one of the first and most valuable appropriative water rights, but also was quite capable of diverting the entire flow of the Kern River, and thus depriving all downstream users of water, "including the majority of the small farms and Haggin's vast holdings."³¹ The Kern Island Canal constituted the essential centerpiece of a proposed agricultural colony that was, in effect, a last-ditch attempt to salvage what remained of earlier investments in Bakersfield businesses and large-scale cotton production. When the plan collapsed, however, the canal and its attendant water rights passed into the hands of Haggin and Carr.

Land acquired by Haggin north of the Kern River had no access at all to water. To remedy that situation, Haggin acquired Kern River water rights—directly and subversively—from the independent farmers' cooperative undertakings. Haggin's partner Carr would first convince canal companies to incorporate, and he and Haggin would then emerge with controlling interest in the stock. Through this means, Haggin gained control of the Buena Vista Canal, the Pioneer Canal, the Stine Canal, and other irrigation projects.³² With the addition of the Calloway Canal in 1876, Haggin gained full control of the appropriation rights to the Kern River, with negative results for settlers and thus development of the county as a whole:

There is much evidence to indicate that Haggin used his absolute control of the water to the detriment of small farmers . . . [M]any settlers were deprived of water after Haggin acquired control of the ditch companies which they had initiated; in one instance the water supply which an early settler had used for many years was completely cut off.³³

The story of San Emigdio settlers is particularly indicative of the "above the law" power exerted by Haggin in his land and water acquisitions. It also demonstrates the relationship between control of water and the ability to acquire land:

The school district of San Emigdio is not subject to irrigation from the river. It is a portion of an old Spanish grant, and a few families had lived there many years. A spring supplied them with irrigation. The spring was confiscated under the law of appropriation, and the water diverted to beneficial uses in a ditch past their lands. Offers were made to buy them out. These poor Mexican farmers refused. Here they had raised their families; here was the only world they knew; here they wanted to stay. The little seepage water which was allowed to escape the large ditches would do service in the support of their families. For the purpose of freezing them out cement was used to prevent even a drop of water escaping on to their lands, and the poor farmers succumbed, while the school with its average attendance of twenty-six children collapsed. The land passed into the canal owners' possession.³⁴

The mounting conflict over rights to the Kern River resulted in the infamous Miller & Lux vs. Haggin & Carr legal dispute of the "appropriationists" and the "riparianists," which determined the dual system of water rights still present in the state.³⁵ In the end the dispute was settled out of court, with Miller conceding water rights in exchange for the construction of a reservoir. The net result, however, was that the total flows of the Kern River were apportioned between the ranching empires, one-third to Miller and Lux lands, and two-thirds to Haggin's, with Buena Vista Lake converted into a storage reservoir for Miller.³⁶ In 1890, the Haggin-Carr-Tevis association was incorporated as the Kern County Land Company (KCLC). This company controlled 375,000 acres in Kern County alone, and over three-fourths of the county's water supply. In the late 1960's, the Kern County Land Company was purchased by Tenneco West; and in 1987 Tenneco West's lands (along with several other large-scale properties) were purchased by Castle & Cooke as

part of its bid to become the leader in global sourcing of fresh fruits and vegetables. Hence the pattern of large-scale dominance over land and water persists to this day.

KCLC Water Control and Arvin Area Development

Between the turn of the century and the 1940's—when Goldschmidt examined the development of Arvin—Kern County Land Company effected a major change in the hydrologic balance of the county. KCLC used Kern River surface flows to irrigate its northern lands, channeling water through the Calloway Canal. At the same time, KCLC lands in the Kern River Delta, which had been irrigated by surface flows, were shifted to irrigation sustained by the pumping of ground water. Exportation of a large percentage of Kern River flows to areas outside its watershed reduced the natural recharge of the ground water table. The initiation of ground water pumping in the Kern River delta, combined with reduced ground water recharge, resulted in the rapid lowering of the ground water table, including that of the Arvin–Edison area, which lies east, and upgradient, of the Kern River delta.

Examination of landholding patterns at the time settlement in Arvin was initiated reveals an interesting void. The area destined to become the Arvin–Edison Water Storage District in roughly forty years is literally the only area in the Kern River drainage basin *not* held in large landownerships (Figure 5). It is entirely surrounded by them, however, with the exception of the few agricultural colonies that have survived the dewatering of the Kern River delta. It is here asserted that alteration of the hydrologic regime to meet land development schemes of the Kern County Land Company created an *unnatural* water deficiency in the Arvin area—a deficiency which led to its somewhat later development relative to the rest of the county.³⁷

Ample evidence exists, as well, to indicate that large landholders, particularly KCLC, delayed development of

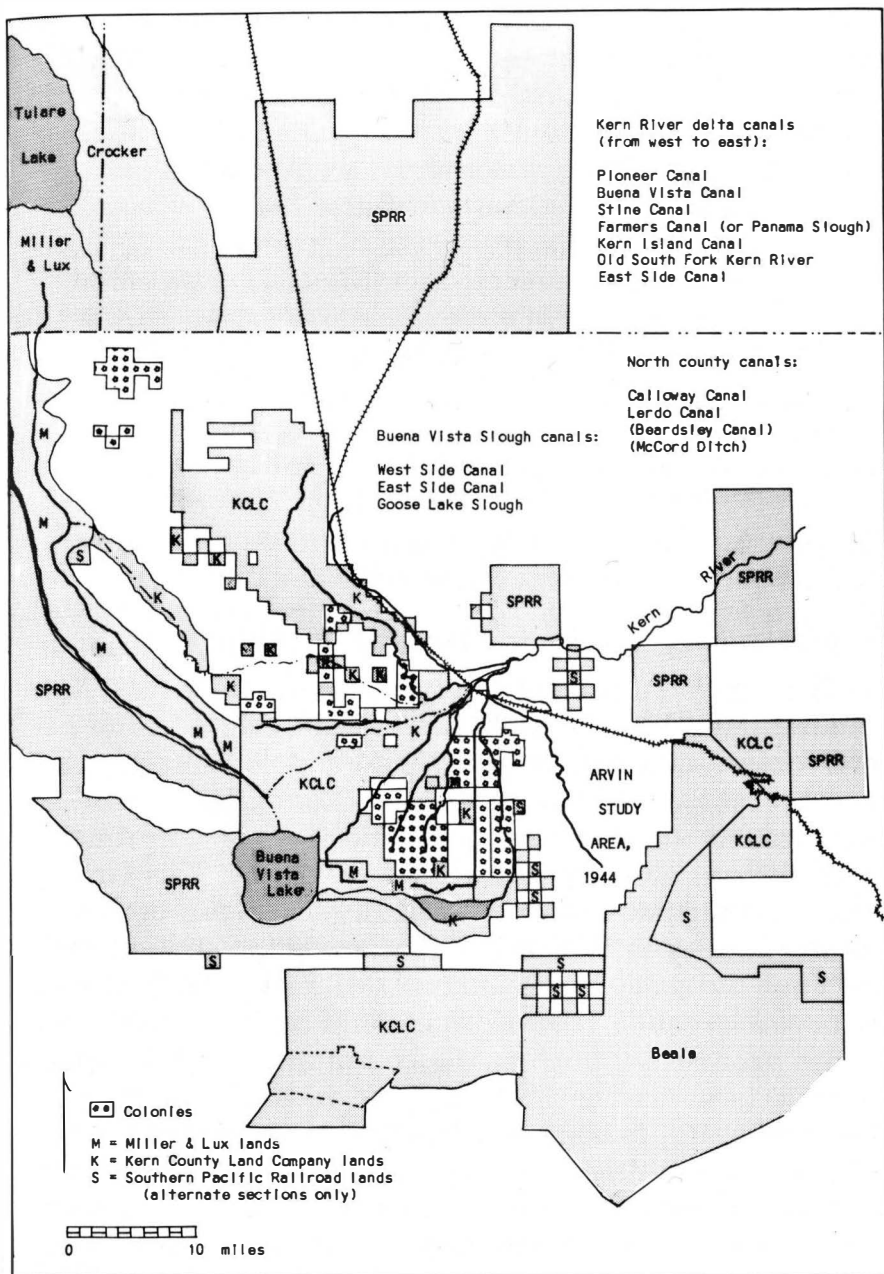


FIGURE 5. *Approximate locations of large landownerships and canals, Kern County, 1898.*

new surface water supplies for the Arvin–Edison area. Essentially, these landholders held the district hostage in order to guarantee cooperation of the Bureau of Reclamation in development of the Friant-Kern Canal without the threat of an acreage limitation. Senator Sheridan Downey, a stout defender of agribusiness interests, wrote in 1947:

Without the consent of the [Kern County Land] Company and its subsidiaries, the whole [Friant-Kern Canal] enterprise will be stillborn. One may think what one likes about the size of the Kern County Land Company's holdings; its legal, economic and physical position are unassailable. Deliberately and futilely to vilify and antagonize the Company, as the 160-acre champions have gone out of their way to do, strikes one as folly of the most willful and reckless variety—a folly that may well have tragic consequences for many of the farmers in the Arvin–Edison district.³⁸

The particular impacts of the Kern County Land Company on the development of the Arvin area must be noted.

Summary: Land Tenure and Historic Development

The regional developmental histories of Tulare and Kern Counties have been strongly influenced by land tenure patterns characterized by large-scale monopolization of public land by urban financial interests. In Kern County this monopolization was more complete, and was gained primarily through control of the surface water supply. This circumstance distinguishes it from the Kings/Kaweah portion of Tulare County in which Dinuba emerged. Though large holdings did exist in the Tulare Lake Basin, small farmers managed to gain a foothold there and become established, in the process supporting the communities which today have become rural towns and cities. In Kern County large landholders suppressed development of small farms, which eroded communities developing in the most fertile areas and left only the backwaters for any kind of independent rural development. Arvin grew in just such a backwater, made even more marginal by the exportation of its one key resource: water.

It is possible, then, to make the case that Dinuba's development (including its original platting by Southern Pacific) was the result of small-scale irrigation works and small-scale, intensive cultivation. In contrast, the relative lack of development in the Arvin area was the result of large-scale land and water ownership *beyond the community boundaries*. The primary and essential difference between the two regions is that small farmers were able to become established on the fans and deltas of the Kings and Kaweah Rivers *despite* the developmental intentions of Southern Pacific and other sources of urban capital. On the Kern River delta, they were not able to escape those sources of control. Consequently, all of the early indigenous efforts necessary for community development were lost.

Continuing control over water resources in the Tulare Lake and Buena Vista/Kern Lake basins effectively drained the various naturally well-watered upstream and upgradient regions which had been colonized by small farmers. This eventually resulted in construction of the Friant-Kern Canal as part of the Central Valley Project. The CVP itself was intended to replenish deeply overdrafted ground water tables on the east side of the upper San Joaquin Valley and stabilize water resources of the state. Unfortunately, both the CVP and its younger sibling — the California State Water Project — have also been employed to develop new lands in areas of large ownerships. Such developments have not only proven detrimental to the economic stability of the small farm areas, but also have overcommitted the available water supply.³⁹

In terms of the Goldschmidt hypothesis and its critics, the developmental history of Arvin and Dinuba very clearly underscores the importance of land tenure in regional development. It also effectively eliminates the single argument of any merit — the developmental influence of Southern Pacific — advanced against it by Hayes and Olmstead. More importantly, this history challenges current notions of com-

munity development processes as dependent on attracting outside investment interests, suggesting that the side effects of money trickling down may be more detrimental to a recipient community and its region as a whole than the slower and more organic process of indigenous, hand-built development.

Finally, the regional histories of Tulare and Kern Counties suggest the direction necessary for research on the relationship between land tenure and rural development. In their critique, Hayes and Olmstead failed to realize the nature of social science. The Arvin–Dinuba study was not a laboratory experiment, where a mistake in lab technique produces insupportable results; nor was it a legal case or a wrestling match, where the winner is determined by precedents or points. The Arvin–Dinuba study was an elaboration of the ethnographic model built in Wasco—a comparative examination of the intimate relations between land tenure, social structure, and the resulting economic facts of life. To disprove a model it is not enough to imply that some facts might not be right: contradictory relations must be shown. The reason why no study has been conducted attempting to show that large farms produce better towns is that all know it would a waste of time to try.



NOTES

1. Paul S. Taylor documented many of these tactics in his long and substantial law review articles from 1955 to 1975. Those which are pertinent to this region are: "The Excess Land Law: Execution of a Public Policy," *Yale Law Journal* 64, Feb. 1955; "Destruction of Federal Reclamation Policy? The Ivanhoe Case," *Stanford Law Review* 10, Dec. 1957; "Excess Land Law on the Kern?" *California Law Review* 46, May 1958; "The Excess Land Law: Legislative Erosion of Public Policy," *Rocky Mountain Law Review* 30, 1958; "Excess Land Law: Secretary's Decision? A Study in Administration of Federal–State Relations," *UCLA Law Review* 9, Jan. 1962. These and others are collected in: Paul S. Taylor, *Essays on Land, Water and the Law in California* (New York: Arno Press, 1979).

2. Walter R. Goldschmidt, *As You Sow: Three Studies in the Social Consequences of Agribusiness* (Montclair, New Jersey: Allanheld, Osmun & Co., 1978), pp. 475-479. See also: Paul S. Taylor, "Walter Goldschmidt's Baptism by Fire: Central Valley Politics," *Anthropology UCLA*, Vol. 8 (1976) pp. 129-140, which is also reprinted in Taylor, 1979.
3. See Goldschmidt's review of Richard S. Kirkendall's essay, "Social Sciences in the Central Valley of California: An Episode," *California Historical Quarterly*, Sept. 1964, in: Goldschmidt 1978, pp. 467-477.
4. Dean MacCannell and Gerald White, "Agricultural Land Ownership and Community Structure in California's Central Valley" (University of California, Davis: unpublished manuscript for 1981 California Policy Seminar, Dept. of Applied Behavioral Sciences). See also: Dean MacCannell and Gerald White, "The Social Costs of Large Scale Agriculture and the Prospects for Land Reform in California," in: Charles C. Geisler and F. Popper, eds., *Land Reform, American Style* (Totowa, New Jersey: Rowman and Allanheld, 1984); and Dean MacCannell, "Industrial Agriculture and Rural Community Degradation," in: L. E. Swanson, ed., *Agriculture and Community Change in the U.S.: The Congressional Research Reports* (Boulder, Colorado: Westview Press, 1988).
5. Michael N. Hayes and Alan L. Olmstead, "Farm Size and Community Quality: Arvin and Dinuba Revisited," *American Journal of Agricultural Economics*, Vol. 66 (1984), pp. 430-436.
6. For a discussion of the four points in question, see: Trudy Wischemann, "Arvin and Dinuba Revisited: The Relationship Between Resource Distribution and Community Development" (University of California, Berkeley: unpublished M.A. thesis, 1991), Chapter 1.
7. Op. cit., note 5, p. 432. A full reference to "Preston" follows in note 8.
8. William L. Preston, *Vanishing Landscapes: Land and Life in the Tulare Lake Basin* (Berkeley: University of California Press, 1981), pp. 122-125.
9. Ibid., p. 147.
10. Ibid., p. 129.
11. Ibid., p. 146.
12. Ibid., p. 161. Preston does not note that at least some of the shift

of population from Traver to Dinuba occurred in response to the rapid alkalization of Traver's soils from the irrigation of Dinuba's lands. See also: Goldschmidt, *op. cit.*, note 2, p. 298.

13. *Ibid.*, pp. 149-150.
14. *Ibid.*, p. 109. Preston notes that "the granting of land(s) to railroads delayed, rather than accelerated, their settlement."
15. Robert C. Fellmeth, *Politics of Land: Ralph Nader's Study Group Report on Land Use in California* (New York: Grossman Publishers, 1973), p. 10. For a concise review of railroad grant conditions requiring resale, see: Sheldon L. Greene, "Promised Land: A Contemporary Critique of Distribution of Public Land by the United States," *Ecology Law Quarterly* 5, 1976, pp. 707-751.
16. Pedro Fages entered the San Joaquin Valley through Uvas Canyon in 1772. Francisco Garcés entered through Tejon Canyon in 1776, emerging at Sinks of the Tejon, not more than five miles from the present site of Arvin. See William Harlan Boyd, *A California Middle Border: The Kern River Country, 1772-1880* (Richardson, Texas: The Havilah Press, 1972) p. 2.
17. *Ibid.*, p. 33.
18. *Ibid.*, pp. 24, 32.
19. *Ibid.*, pp. 118, 126.
20. *Op. cit.*, note 8, p. 122.
21. Margaret Aseman Cooper Zonlight, *Land, Water and Settlement in Kern County, California, 1850-1890* (New York: Arno Press, 1979).
22. *Ibid.*, p. 262.
23. *Ibid.*, pp. 286-288.
24. *Ibid.*, p. 289, citing *Kern County Weekly Courier*, Feb. 14, 1874.
25. *Ibid.*, p. 291, citing *Kern County Courier-Californian*, August 7, 1879.
26. *Ibid.*, p. 297. Under government land programs, an 80-acre homestead cost \$22 (27 cents/acre); 160 acres claimed under pre-emption cost \$400 (\$2.5/acre). In Tulare County, people who were encouraged by the railroad to settle on railroad lands in the early 1870's and promised a price of \$2.50/acre were charged—when Southern Pacific received title to the land—between \$17 and \$45/acre, reflecting improvements, including irrigation

canals, that the settlers themselves had made. See also: Lawrence J. Jelinek, *Harvest Empire: A History of California Agriculture*, Second Edition (San Francisco: Boyd & Fraser, 1982) p. 44.

27. Op. cit., note 21, pp. 293-294, citing the *Courier*, March 7, 1884.
28. Ibid., p. 294, citing the *Courier*, July 25, 1874.
29. Ibid., p. 296.
30. Ibid., p. 260.
31. Ibid., p. 303.
32. Ibid., pp. 298-300.
33. Ibid., pp. 321-323.
34. Ibid., p. 323.
35. See Joe S. Bain, Richard E. Caves, and Julius Margolis, *Northern California's Water Industry* (Baltimore: John Hopkins Press, 1966), pp. 62-74. See also: Thomas Edward Malone, "The California Irrigation Crisis of 1886: Origins of the Wright Act" (Stanford University: unpublished Ph.D. thesis, 1964).
36. Op. cit., note 21, p. 331, citing Fitzgerald, 1939, p. 26.
37. Hayes and Olmstead note the problem of Arvin's low and declining water table in the late 1930's, but ascribe it simply to over pumping (p. 433). They raise the question of water levels in order to rationalize Arvin's farm size (bigger farms to pay for higher water costs). They also claim larger farms there were a "natural" result of Arvin's later agricultural development (p. 435). Although these specific points are addressed in Wischemann (op. cit., note 6), the influences of large landowners presented in this paper and their effects on both aspects of Arvin's development should be noted.
38. Sheridan Downey, *They Would Rule the Valley* (San Francisco, 1947), p. 96.
39. Don Villarejo, *New Lands for Agriculture: The California State Water Project. A Report on Land Ownership and Land Use in the State Water Project Service Area of the Upper San Joaquin Valley* (Davis: California Institute for Rural Studies, 1981). See also: Don Villarejo and Judith Redmond, *Missed Opportunities—Squandered Resources: Why Prosperity Brought by Water Doesn't Trickle-Down in the California Central Valley* (Davis: California Institute for Rural Studies, 1988).