

APPENDIX C –
SUMMARY REPORT ROBERTS ISLAND AND UNION ISLAND RIPARIAN
WATER RIGHTS INVESTIGATION, SAN JOAQUIN COUNTY, CA, JUNE 2008

**SUMMARY REPORT
ROBERTS ISLAND AND UNION ISLAND
RIPARIAN WATER RIGHTS INVESTIGATION
SAN JOAQUIN COUNTY, CA.
MAY 2008**

Table of Contents

1. Introduction.....	3
2. Methodology.....	4
3. Summary of Findings.....	8
3.1. Swamp and Overflow Land Sales, 1859-872	8
3.2. Land Subdivision, 1873-1888.....	11
3.3. Land Subdivision Roberts Island, 1889-2008.....	12
3.4. Land Subdivision Union Island, 1895-2008	12
4. Conclusion	14

1. Introduction

Tim O’Laughlin of O’Laughlin & Paris, Attorneys at Law, requested JRP Historical Consulting, LLC (JRP) in August 2007 to undertake historical research related to riparian water rights on Union Island and Roberts Island in the southern San Joaquin Delta in T2N/R5E, T1N/R4E, T1N/R5E, T1N/R6E, T1S/R4E, T1S/R5E, T1S/R6E, T2S/R4E, T2S/R5E, Mount Diablo Meridian. (**Maps 1A and 1B**) The study’s primary focus was to identify all those parcels of land on Union Island and Roberts Island that were originally non-riparian at the time a patent was issued, or have become so over time by their having been severed from their contiguity to a natural watercourse.

Riparian water rights and the riparian doctrine were introduced into California by the California legislature’s adoption of the common law of England. Lands contiguous to streams acquired by private parties from the State of California, or under Spanish and Mexican grants have been held by the California courts to possess riparian water rights.¹ The title to parcels on Union Island and Roberts Island derive from these sources with the majority of acreage being Swamp and Overflow Land acquired from the State of California. (**Maps 2A and 2B**) The riparian right is “part and parcel” of the land and is not acquired by use, nor lost by disuse. With a grant of land the riparian water right passes to the grantee, provided that the conveyance does not reserve from its operation any riparian rights incident to the land. Riparian rights can be lost if in the subdivision of a riparian tract of land, individual parcels are so created as to be left without physical contiguity to a watercourse. Under California law, parcels severed by subdivision or conveyance from land bordering a stream are considered to have permanently lost riparian rights unless the original riparian right is reserved in the detached parcels.² Where severance from contiguity to a stream has occurred without ownership change, riparian rights may also be lost. The current study is designed to identify through historic map research those parcels on Union Island and Roberts Island that throughout their history have been at some point in time been severed from their contiguity to a watercourse and, therefore, may have lost their riparian status.

It is important to note that this study did not systematically examine actual deed transactions to determine whether or not grantors may have preserved the riparian right in detached parcels by stipulation in conveyances. Nor did it seek historical evidence regarding riparian rights on land severed from contiguity to a stream without ownership change. Rather, the principal objective has been to show the potential extent of loss of riparian water rights through the original patenting process or by subsequent land subdivision that resulted in parcels becoming detached from contiguous watercourses. The findings of this study are presented in this report and are displayed graphically in

¹ *Lux v. Haggin*, 69 Cal. 255 (1884), 10 Pac. 674 (1886); *Pope v. Kinman*, 54 Cal. 3, 4-5 (1879); and *Holmes v. Nay*, 186 Cal. 231, 235 (1921).

² *Copeland v. Fairview Land & Water Company*, 165 Cal. 148, 161, 131 (1913); *Strong v. Baldwin* 154 Cal. 150, 156-157 (1908).

data tables and on maps of Union Island and Roberts Island showing parcels which have lost their contiguity to a waterway.³ (Table 1, Maps 3A and 3B)

2. Methodology

To achieve the primary goal of this project, JRP referred to historical documents and map evidence providing information on the original patenting of land on the two islands by private individuals and subsequent land transfers affected through sale, subdivisions, and in some cases consolidations of existing parcels. Most of the land within the two islands was granted to private individuals by the State of California as Swamp & Overflowed (S&O) Lands. Thus, the California State Lands Commission's state land records related to the acquisition and disposition of grant lands was a key starting point in the research for this project. Other indispensable records were rural plat books containing information on property ownership derived from statistics maintained by county assessors historically to make annual real property tax assessments on individuals and corporations owning land within their jurisdiction. Fortunately, a reasonably good run of these records exists for San Joaquin County through 1919. In more recent years, county assessors ceased making these map books, but they were of sufficient usefulness for some commercial purposes that private companies periodically gathered the assessor's tabular information on real property ownership and published county land ownership atlases on their own. For the agricultural regions of San Joaquin County sufficient interest resulted in production of several such rural map books beginning in the 1960s. Other miscellaneous maps showing land ownership in the southern Delta country have been produced by the San Joaquin County Surveyor, licensed private surveyors and the U. S. Bureau of Reclamation.⁴

Given the general character of the low-lying lands of the southern Sacramento-San Joaquin Delta, JRP had assumed from the outset that the vast majority of the acreage on Union and Roberts islands was designated as S&O land under the Swamp and Overflow Land Act of September 28, 1850.⁵ By this act, Congress granted to the state swamp lands on the public domain requiring drainage to make them fit for cultivation and overflowed lands subject to periodic flooding requiring levees to protect the land and make it productive. This federal grant to the State of California transferred more than two million acres of public land from federal possession to the State of California, which then sold the S&O lands to private landowners who promised to reclaim them. Nearly one-quarter, or 500,000 acres, of the S & O land was located in the Sacramento-San

³ Riparian rights cannot be extended to include contiguous non-riparian parcels becoming united in ownership. Where contiguous quarter sections were granted by separate patents, each patent being based upon a separate entry, the California Supreme Court held that each parcel constituted a separate tract of land. The riparian right of those parcels contiguous to a watercourse, therefore, did not extend to the non-contiguous parcels, even though granted to the same person on the same day, provided that the non-contiguous adjacent parcels were conveyed by separate patents. On this latter point see *Lux v. Haggin* 69 Cal 255, 424-425 (1884), 10 Pac. 674 (1886); *Boehmer v. Big Rock Irrigation District*, 117 Cal. 19, 26-27, 48 (1897); *Title Insurance & Trust Co. v. Miller & Lux*, 183 Cal. 71, 82 (1920).

⁴ See Bibliography for complete list of sources.

⁵ 9 Stats. 519.

Joaquin Delta. Records of the state' acquisition of these S&O grant lands and their disposition to claimants and patentees are held by the California State Lands Commission and contain, in part, date of purchase, name of purchaser, acreage, and legal description of the parcel boundaries.

Lands patented as S&O grant lands are described by legal subdivision, not by metes and bounds. When the greater part of a legal subdivision (i.e, a 40 acre quarter quarter-section) was wet and unfit for cultivation the whole of the legal subdivision was included in the list of S&O land, if the greater part of such subdivisions was dry, it was excluded. Thus, the legal subdivisions described in the patents follow the township, range, sections and divisions of sections of the public land system, and therefore, are relatively easy to map.

Sale of S&O land on the two islands began in 1859 and continued at an irregular pace through 1872 when the last S&O Certificate of Purchase was issued by the state. With the exception of the Mexican grant land at the southern edge of each island, this thirteen year period marked the initial subdivision of the islands into private possession and corresponded with the earliest efforts to erect systems of protective levees on the rim of the island adjacent to the rivers and major sloughs and cross levees on the interior of the islands along high ridges or property boundary lines. The patents also separated the individual properties into riparian and non-riparian parcels.⁶ From information contained in these state land acquisition and disposition records, S&O parcels were platted onto maps using current section lines as projected on U.S.G.S topographic quad maps as our reference. Those S&O tracts not adjacent to a natural waterway have been classified and coded appropriately on these maps as non-riparian parcels – none of which could become reclassified later as riparian.

The remaining acreage on Union and Roberts islands not classified as S&O land was part of a Mexican land grant, known as Rancho El Pescadero. It became private property in 1843 when the Mexican Governor of California, Manuel Micheltoarena, granted an eight square league (35,546 acres) tract southwest of present day Stockton to Antonio Maria Pico. The United States confirmed the grant and issued a patent for the property on March 10, 1865 to Pico and Henry M. Naglee. The rancho included nearly all of the acreage at the southern end of both islands bordering on Old River. The northern boundary of Rancho El Pescadero coincides with modern day Grant Line Canal on Union

⁶ On these islands, land was subdivided into smaller parcels, but over the years consolidation of these small parcels into a large single block of land also occurred. These large blocks were sometimes later subdivided a second time into a configuration of smaller parcels different from the pattern existing prior to consolidation. When small parcels that are differentially riparian and non-riparian are consolidated, the riparian right does not expand to include the whole consolidated parcel. Thus, in certain situations, a parcel, or a portion of a parcel, may appear riparian on the face of a map, but understanding the history of the parcel belies its apparent riparian status. This occurred to a great extent in eastern Union Island where the land was initially subdivided into many S&O tracts, consolidated under a single owner, and then subdivided a second time irrespective of the original S&O parcel lines. The latter subdivision could create parcels which were adjacent to a waterway, but contained acreage from two or more former S&O tracts. The result is interior portions of properties bordering on streams which are partially non-riparian because the interior portion once belonged to a different parcel.

Island and with Undine Road on Roberts Island. Initial subdivision of Rancho El Pescadero, therefore, was from patentees Pico and Naglee to private parties beginning after 1865. By 1870 only a couple of parcels on the islands within the rancho had been sold and all rancho parcels at that time appear to have remained riparian to Old River.

For the period 1850 until the imposition of new tax codes during the Progressive Era in the second decade of the 20th century, property tax was the primary revenue source for both state and local governments in California. Thus assessment records provide reasonably reliable documentation on ownership and transfers of real property in the state on an annual basis. The surviving San Joaquin County Assessor Plat Books provide property ownership information for each legal parcel of land on Roberts and Union islands from the year 1879 through 1919, with the exception of 1890, 1894 and 1901 where data is unavailable, and for the years 1909 and 1910 where information is lacking for certain townships within the study area. The San Joaquin County Assessor compiled new map books each year to facilitate the assessment and taxation of real property. Each page of the plat books contains a base map showing one township and range divided into sections and quarter-sections; super-imposed over these survey lines are the parcel lines of each tract of private land together with the property owner name and number of acres in each parcel. The maps also depict major rivers and sloughs, and identify some cultural features that might influence property values such as levees and cross-levees, cuts, canals, drainage ditches; and major transportation features -- roads, railroads, wharfs, bridges and ferries. According to the 1886 *Codes and Statutes of California*, state law required county assessors to prepare assessment rolls with *written* description of land, but not necessarily maps. State code did, however, allow for the individual county Boards of Supervisor to order the assessor to create plat map books for “blocks within any incorporated city or town, and mark thereon in each subdivision the name of the person to whom it [was] assessed.”⁷ There was no state tax code requiring map books for rural lands, but, in San Joaquin County, plat books were made for rural lands throughout the county, such as those for Union and Roberts islands. Law required that ownership of property be assessed to the “persons by whom it was owned or claimed, or in whose possession or control it was” in March of each year. In addition, if property was in possession of a trustee, guardian, executor, or administrator, it was assessed to such person.⁸

While these assessment plat maps provide a reliable source for charting land subdivision and sale resulting in loss of contiguity to a waterway through 1919, there is no set of records for the period from 1920 to 1963 that provides a similarly convenient and reliable data base for tracing land disposal patterns on the islands. One San Joaquin County Map from 1926 showing property ownership was found and it was used to compare data to the previous 1919 assessment map. JRP interviewed several long-time county employees in the assessor’s office and the county surveyor’s office who believe that local surveyors Budd & Widdows were commissioned to publish county-wide property ownership maps

⁷ F.P. Deering, *The Codes and Statutes of California* (San Francisco: Bancroft-Whitney Company, 1886), 547-548, 557-558.

⁸ F.P. Deering, *The Codes and Statutes of California* (San Francisco: Bancroft-Whitney Company, 1886), 546, 553.

in the 1930s, but none could be located by us in any county offices or in other public repositories of historic maps. None of our informants recalls seeing any county mapping from the 1940s or 1950s showing property ownership and the assessment roll books kept by the assessor's office have been discarded by the county. The lack of systematic information on property ownership for the period from the late 1920s into the 1960s has been partially overcome by use of the water right application files held by the State Water Resources Control Board, but these records only provide a partial picture of property ownership. Information compiled for mapping prepared by the U. S Bureau of Reclamation in 1963 provides the next comprehensive set of data on property ownership on the two islands.⁹

For the past forty years, rural plat map books produced by private companies provide another reliable source for property ownership for the more modern era. JRP relied heavily on these types of commercial maps, which were published and updated almost annually, to bring the study up to date. These maps depict property lines and ownership in a way similar to the old county assessor maps described above, providing owner names and acreage on maps giving township, range, and section numbers. Also shown are waterways, canals, levees, railroads, and roads. The purpose of the maps as stated in one 1993 edition is "to provide farmers, ranchers, growers, loan institutions, agricultural product authorities, government agencies, realtors, and individuals who have a requirement to know land ownership and location with information that will help them in this area of interest."¹⁰

These maps were published by various private companies and have been found for San Joaquin County that contain comprehensive mapping of land ownership parcel-by-parcel for Union and Roberts islands for the following years: 1966, 1969, 1979, 1981, 1984, 1986, 1993, 1995, 1997, 2003, and 2005. Although the source of information is not given for the 1966 and 1969 maps, the remainder used ownership and parcel information derived from property ownership data maintained by the San Joaquin County Assessor. Rural plat map books beginning in 1979 differ in an important way from the earlier source maps in that they show each individual legal parcel and parcel numbers. With this information, it is possible see adjacent parcels held by the same owner as distinct parcels and determine if land had been subdivided and severed from contiguity to a waterway without conveyance of title. Source maps used from 1879 to 1979 show property ownership boundaries and may not depict distinct legal parcels within the boundaries of a larger tract held by a single owner, if any such parcels existed. From 1879 to 1979, therefore, it was not always possible to determine loss of contiguity to a waterway of land subdivided, but held by the same owner. All data for such subdivisions are from maps dated between 1979 and 2008.

⁹ As noted, mapping showing land ownership is lacking for a considerable period of time in the 1920s through 1950s. During these years subdivision and/or consolidation of property along with ownership changes may have occurred that would alter the findings of this study. Indeed, even when maps for consecutive years are available, such actions may have occurred between drafting of maps and not be evident. Closing the chronological data gaps would tend to have the effect, if any, of increasing the number of non-riparian parcels.

¹⁰ Echo Map Company, *Agri-Land, San Joaquin County, Property Ownership Maps Plat Book and Guide* ([n.p.]: Echo Map Publishing Company, 1993).

Finally, JRP was able to obtain 2007 and 2008 parcel information and mapping directly from the San Joaquin County Assessor's Office and from the First American Real Estate Service online database.¹¹ JRP spot checked the accuracy of the various types of ownership maps used from 1879 to 2005 against other sources such as property deeds, lease agreements, water right applications, and other primary and secondary historical evidence and has determined them to contain reliable property ownership and property boundary information for the purposes of this study.

The riparian right of an owner of land adjoining a stream generally applies only to natural bodies of water and in waters naturally flowing therein. Thus, our assumptions about what constitutes a natural body of water bordering or flowing through Union and Roberts islands influenced the conclusions of this study. For the purposes of this study, land adjacent only to a watercourse originally artificially created was in all cases assumed to be non-riparian. Only lands abutting natural watercourses were considered riparian. JRP examined numerous early maps, survey notes and other historical documents in determining which waterways were natural. On Roberts Island, the natural waterways are assumed to be the San Joaquin River; Burns Cut-off; Middle River; Old River; Whiskey Slough to the NE 1/4 of Section 8, T1N/5E, MDM; Turner Cut from Section 31 to the SE 1/4 of Section 30, T2N/R5E, MDM.¹² The remainder of Whiskey Slough and Turner Cut as depicted on current USGS topographic maps, along with that portion of Trapper Slough in Section 21, T1N/R5E, MDM, and the unnamed body of water between the head of Trapper Slough and Whiskey Slough in Sections 21 and 16, T1N/R5E, MDM are considered artificial waterways. On Union Island, the natural waterways are assumed to be Middle River and Old River. The Grant Line Canal, Fabian and Bell Canal, North Canal, Doughty Cut, and that portion of Salmon Slough in Section 27, T1S/R5E, MDM, are considered artificial waterways. In addition, high water sloughs that were cut off by reclamation and levee construction on the two islands have been assumed not to convey riparian status to lands once contiguous to these sloughs.¹³

3. Summary of Findings

3.1. Swamp and Overflow Land Sales, 1859-872

From the initial S&O land patents issued by the State of California to individuals on Union and Roberts islands between 1859 and 1872 and subsequent land transactions and subdivisions continuing through 2007, the vast majority of land on both islands has been severed from contiguity to natural waterways, either by the original grants or patents, or by subsequent subdivision and changes in ownership. Mapping these parcels reveals that

¹¹ San Joaquin County Assessor website. Accessed 2008 at <http://www.sjgov.org/assessor/>; Additional assessor data from First American Real Estate Service.

¹² The natural portion of the Turner Cut was also known as the East Branch of Whiskey Slough.

¹³ Mapping evidence from the 1870s and 1880s shows Whiskey Slough terminating in the NE 1/4 of Section 8, T1N/R5E MDM; the natural part of Turner Cut reaching the SW 1/4 of Section 30, T2N/R5E MDM; and Trapper Slough ending in Section 30, T1N/R5E, MDM. See Bibliography for list of maps.

virtually the only tracts still riparian are those around the perimeter of each island. Approximately seventy percent of the parcel divisions which created non-riparian tracts had occurred by 1915. (**Table 1**)

As noted above, the earliest patents of S&O land issued by the State on Union and Roberts islands were in 1859. California received title to the land from the Federal Government under the 1850 S&O Act subject to the identification of the land granted and the segregation of the lands classified as swampy or overflowed from the remainder of the public domain. The title was inchoate until the land was identified as S&O land by an approved survey and the legal title transferred to the State. The State and Federal governments often disagreed as to the extent of lands that might be segregated as S&O. Through the 1850s the State turned over this important function to the local authorities who appointed county surveyors to segregate the lands identified as S&O. These properties were then opened for sale through the State Land Office (predecessor to the State Lands Commission). It was not until 1866 that the manner by which S&O lands were identified, surveyed and selected in California was finally resolved. The Act of July 23, 1866 provided for state segregation maps and the identification of S&O lands by joint action of federal and state authorities. Patents were issued to the State of California when a list of S&O grant lands was presented to and approved by the Secretary of the Interior. The title conveyed by the patent related back and inured to the benefit of the state as of the date of the granting act.

The State often offered S&O land for sale prior to approval of the official federal survey and the S&O grant lists by the Federal Government. The State issued Certificates of Purchase to individuals claiming these S&O lands, often a decade or more in advance of issuance of an actual patent.¹⁴ Certificates of Purchase for state grant lands were typically issued upon the payment of a small percentage of the purchase price to the State Land Office. The key date for establishing the priority date for a riparian water rights claim on S&O lands under the controlling decision of the California State Supreme Court in *Lux v. Haggin* is the date of the issuance by the State of California of a Certificate of Purchase for a swampland tract.

Certificates of Purchase issued for properties on Union and Roberts islands range in date from 1859 to 1872. The earliest Certificates dating from 1859 into the middle 1860s were issued primarily for lands riparian to the San Joaquin River and to a lesser extent along Middle River. Various acts passed by the California State Legislature between 1859 and 1866 limited the maximum amount of S&O land that could be purchased by an individual to 640 acres with maximum frontage to a waterway of one half mile.¹⁵ Such limitations on the S&O claims during this period resulted in small rectangular parcels

¹⁴ In the case of the area embraced by Union Island and Roberts Island, the land was classified as S&O land without any actual survey lines being run in the field. These lands became part of two bodies of swampy and overflowed lands that were simply noted on the U.S. Surveyor's plat map as "Notoriously Swampy & Overflowed" tracts "established by the protraction of the approved plats of adjoining townships." The survey, covering T1, 2, 3, and 4 N and T 1S and R 3, 4, 5 and 6 E was approved in 1872 by J. R. Hardenberg, Surveyor General of California, under the provisions of the Act of Congress of July 23, 1866.

¹⁵ John Thompson, "The Settlement Geography of the Sacramento-San Joaquin Delta, California" (PhD. diss., Stanford, 1957), 193.

lining the San Joaquin and Middle rivers compared to the large conveyances following 1868 when acreage and frontage limitations were lifted.

Between 1859 and 1868, inclusive, a total of thirty-one Certificates of Purchase were issued for S&O land on Roberts and Union islands. The topography of the land largely determined the location of these early parcels. Generally, wide strips of high land lined the river channels surrounding both islands with the center being low, poorly drained, and frequently flooded. In addition, the upstream areas of both islands were higher than the downstream. These characteristics are still evident by the time of the first USGS topographic survey around 1914, even though considerable alterations to the landscape had occurred by this time. At this date, elevations of ten feet above sea level were common in southern Roberts Island and southeastern Union Island, while elevations at, or below, sea level were typical on the remainder of both islands. Properties along the rivers in these higher areas, therefore, were the most practical to farm and were the earliest tracts sold as S&O land. Of the thirty-one certificates issued between 1859 and 1868, twenty-seven were riparian to a natural waterway: nineteen on the San Joaquin River and nine bordering on Middle River. Of the four non-riparian tracts, three were on Union Island, two of which were in the higher, eastern part. Total non-riparian acreage for this time period was 1,520 acres.¹⁶

Passage of the Green Act in March 1868, which eliminated acreage limitations on S&O land sales, changed the pattern of S&O parcels sales on Union and Roberts islands. The initial ten year period of S&O sales on the two islands was characterized by disposition of many small parcels near rivers, while parcels sold from 1868 to 1872 were generally larger and encompassed interior areas.¹⁷ The person to claim the largest amount of land on Union and Roberts islands after 1868 was George D. Roberts of the Tideland Reclamation Company who claimed over 60,000 acres on both islands under four Certificates of Purchase in 1869.¹⁸ All of this acreage was riparian to one or more of the natural waterways on the islands. Between 1870 and 1872, claimants filed twenty-six additional Certificates of Purchase for swampland tracts, most were for small tracts of approximately 40 to 120 acres, but eight were substantially greater in size, the largest being 2,285 acres on Union Island by John Petty. A total of only four of the eighteen parcels with Certificates of Purchase dating from 1870 to 1872 were riparian to a natural waterway. Total non-riparian land created by issuance of S&O patents after the Green Act to 1872 was 5,684 acres.

¹⁶ Acreage figures for S&O land are from the disposition records at time of sale and may be slightly different from current figure of the same parcel.

¹⁷ This act was passed by the state legislature on March 28, 1868.

¹⁸ In 1868 Roberts began buying swamplands throughout the Delta, accumulating, at one time, a quarter million acres. Roberts formed the Tideland Reclamation Company in 1869 with a capitalization of \$12,000,000 and control of some 120,000 acres of S&O land in the Delta. The company's board of directors included some of the leading financial investors and land developers of the era: Judge Solomon Heydenfeldt, Lloyd Tevis and James Ben Ali Haggin. The company began actual reclamation work by constructing levees on Roberts Island in 1870 and Union Island in 1876. Alan M. Paterson, Rand F. Herbert and Stephen R. Wee, *Historical Evaluation of the Delta Waterways: Final Report* (Sacramento: California State Lands Commission, December 1978), 7-8.

A map of the Certificates of Purchase from 1859 to 1872 shows a greater number of riparian parcels and riparian acreage in both islands. Roberts Island appears as a row of small riparian parcels sold prior to the Green Act in southern Roberts Island lining the upper San Joaquin River as far north as the junction with Burns Cutoff, and four along the upper Middle River. A few other parcels are in this part of Roberts Island, but nearly all of the remaining acreage on the island is owned by George D. Roberts. Union Island in 1872 appears as several riparian tracts on the east side of the island along Middle River and three non-riparian. A large block of five additional S&O purchases were located just north of the current Grant Line Canal alignment. George D. Roberts, again, owned almost all of the rest of the island. By 1872, S&O sales on both islands created 23 non-riparian parcels for a total of approximately 7,204 acres.

3.2. Land Subdivision, 1873-1888

George D. Roberts was a land speculator and developer who created Tideland Reclamation Company to finance reclamation of Delta islands with the aim of profiting by selling the higher valued reclaimed tracts of agricultural land protected from flood by levees to individual farmers. Assessor maps from 1879 reveal that the reclamation efforts of Roberts and others had brought about some changes in land ownership patterns since 1872. On Roberts Island, the differences were minor: the small tracts along the San Joaquin and Middle rivers remained intact, and Roberts' former land was still held in large parcels by the Glasgow-California Land Company and M. C. Fisher.¹⁹ On Union Island north of Rancho El Pescadero, the changes were more profound. All of the S&O tracts in the east part of the island were consolidated under a single ownership: Thomas H. Williams and David Bixler. In fact, Williams and Bixler owned all of Union Island north of the grant line in 1879 except for a 200-acre S&O purchase, which they acquired by 1882. South of the grant line, former rancho land on both islands was still largely in the hands of grantee H.M. Naglee with the exception of a few parcels in the southeast part of Union Island and southern Roberts Island. All were riparian to Old River. Also around this time, reclamation projects began on both islands by Glasgow-California, Williams and Bixler, Naglee, and other landowners.²⁰

Subdivision of larger tracts and creation of interior non-riparian parcels was minimal on both island following S&O sales in 1872 through the 1880s, amounting to only 756 acres, all on Roberts Island. During this time landowners undertook the first large reclamation projects, but these efforts proved insufficient protection against floodwaters and breaches in the levees were frequent. Such circumstances made small farmers reluctant to invest

¹⁹ Fisher was superintendent of Glasgow until 1877 when John W. Ferris took over company operations. Ferris had personal holdings in southern Roberts Island while superintendent. See John Tompson, *Tule Breakers* (Stockton: University of the Pacific, 1983), 222-227.

²⁰ *Stockton Independent*, 28 November 1876; *San Francisco Alta*, 18 January 1875; E.E. Tucker Field Notes, 1878. Field Books, Part 2, Box 6: Book 92. William Hammond Hall Papers, California State Archives.

in, and make improvements to interior parcels, forestalling subdivision of interior lands and the lower parts of both islands.²¹

3.3. Land Subdivision Roberts Island, 1889-2008

By the late 1880s, property owners on Roberts Island began to form reclamation districts to facilitate cooperative construction of sturdier levees. Coincident with establishment of these districts, the large parcels extending from the banks to the deepest peat lands in the center of the island were subdivided, thereby creating a large number of non-riparian parcels. Reclamation District (RD) 524 formed on Middle Roberts Island in 1889 and RD 544 formed on Upper Roberts Island in 1892. From 1889 through 1895, 27 parcels were severed from their riparian streams on Roberts Island totaling 3,534 acres. All were in RD 524 and RD 544 and 18 more severances took place in 1891 and 1892 encompassing 2,601 acres. Subdivision of Lower Roberts Island into smaller tracts began around 1897 at the same time as the establishment of RD 684 in October of that year. Prior to this date Lower Roberts Island had been held in a single parcel owned by the Glasgow California Land Company. From 1896 through 1900, there were 18 parcel severances on all of Roberts Island accounting for the creation of 4,964 acres of severed land. Fifteen more severances occurred in 1897 and 1898 comprising 4,659 acres, eleven of these, were in RD 684. After these two periods of considerable activity on Roberts Island, 1,193 acres in eight parcels were severed from 1900 through 1911. Subdivision of the Wilhoit and Douglass tract on Middle Roberts Island in 1912 created 28 non-riparian parcels totaling 2,608 acres, many of which were 40 acres lots. Nine additional severances occurred on Roberts Island from 1912 to 1916 for 723 acres.²²

After 1916, the only remaining large tract with significant interior acreage still riparian on Roberts Island was 3,913 acres owned by the Woods family on Middle Roberts Island. This land was eventually subdivided and sold between 1926 and 1963 resulting in 24 parcels severed from their riparian connection to Middle River. Forty-four severances occurred from 1963 to 2008 on Roberts Island for 4,109 acres.

3.4. Land Subdivision Union Island, 1895-2008

The subdivision of land into non-riparian parcel followed a different course on Union Island. As noted above, after the sale of S&O land, the entire island north of Rancho El Pescadero was consolidated under the ownership of Williams and Bixler. These two men

²¹ *Stockton Herald*, 12 March 1884, 3; 13 March 1884, 3; 18 March 1884, 3; 18 April 1884, 3; *Mining and Scientific Press*, 11 December 1875, 374; *Stockton Independent*, 13 November 1875. Acreage figures for subdivided and severed parcels are from current assessor maps. In a few instances where historic parcel lines are different from current boundaries, the figures are estimates, or are from maps contemporary to the severance.

²² Reclamation District Number 684 Petition and Formation, 4 October 1897, *Swamp and Overflowed Lands, Vol. 3*, San Joaquin County Recorder; *Stockton Daily Independent*, 16 September 1897; Harmon S. Bonte, *Financial and General Data Pertaining to Irrigation, Reclamation and Other Public Districts in California*, California Department of Public Works Bulletin No. 37 (Sacramento: Division of Water Resources, 1930), 152, 154, 157.

were flush with capital and, rather than form a reclamation district, built levees independently beginning on the east side of Union Island in the late 1870s. By 1880, Williams and Bixler had enclosed this area with a levee along Middle River, the north/south Kidd Levee protecting the 2,500 acres of the former Kidd Ranch, the north/south Elk Ridge Cross Levee from the grant line running north to Middle River about two miles west of the Kidd Levee, and a south levee along the rancho grant line as far as the cross levee. Excavations for the south levee created a channel which was further improved into the Grant Line Canal. Floods around this time broke through the grant line levee and destroyed the integrity of the canal, thwarting plans for a shipping channel. While the levees were repaired, the canal was not immediately rebuilt.²³

Similar to events on Roberts Island, high water also periodically overwhelmed the early levees on Union Island and hampered reclamation. In addition to the 1880 flood, an 1884 inundation breached the Elk Ridge Levee and flooded land on the east side of Union Island. Throughout the 1880s, Williams and Bixler largely abandoned reclamation efforts west of the Elk Ridge Levee and it was frequently underwater. Finally, in 1891 levee construction commenced to enclose western Union Island, which involved completion the Grant Line Canal and construction of North Canal. These efforts were in vain, however, as flood waters in the same year broke through the south levee adjacent to Grant Line Canal, the west side levee along Old River, and the levee lining North Canal. These breaks were not repaired until 1898, and again left all of the land west of the Elk Ridge Levee susceptible to flooding.²⁴

While subdivision activity on Roberts Island occurred concomitant with the formation of reclamation districts, subdivision of land on Union Island does not appear to have been directly related to reclamation efforts, but rather to the dispensation of the Thomas H. Williams and David Bixler estates. Following the death of Thomas H. Williams in 1886, Williams and Bixler divided their holdings with the Williams Estate receiving all of western Union Island and roughly half of the eastern part of the island. David Bixler retained large acreage in the east and central part of the island. This event did not create non-riparian land, however, and the island remained in large riparian tracts, into the late nineteenth century.²⁵

Subdivision creating non-riparian interior tracts on the former Williams and Bixler property began to occur around 1897. Seven parcels comprising 4,590 acres became non-riparian from 1895 through 1897, six in 1897 alone for 4,551 acres. All of these were in the east part of the island. Creation of non-riparian parcels on the west side of Union Island north of the rancho grant line occurred later. Some subdividing of the Thomas H. Williams Estate did occur beginning about 1899 with a large parcel along Old River and a small tract on Middle River, but these remained riparian. Only one parcel on

²³ *Sacramento Union*, 29 May 1880, 8.

²⁴ *Stockton Daily Independent*, 8 May 1897, 5; 14 September 1878, 3; 19 June 1898, 3; E.E. Tucker Field Notes, 1880, 92:4, 5; *Stockton Herald*, 27 May 1880, 3; *Stockton Herald*, 29 May 1880, 3; *Sacramento Union*, 29 May 1880; *Sacramento Union*, 24 June 1884, 1; "The Union Island Middle Division Flooded," *Stockton Independent*, 1 June 1890, 4.

²⁵ *Stockton Daily Independent*, 8 May 1897, 5; 19 June 1898, 3.

the entire island became non-riparian from 1898 to 1911 and it was in the west side. Approximately 5,731 acres jointly owned by Thomas H. Williams Jr., F.H. Johnson and F.S. Johnson was subdivided about 1911 resulting in severance of a 2,932 acre parcel retained by F.H. Johnson. The remaining acreage held by Williams was still riparian to Middle River and also fronted on Grant Line Canal, and North Canal until 1914 when it was subdivided into four parcels, three of which, totaling 1,925 acres, were severed from Middle River.²⁶

Additional subdivision activity occurred from 1912 through 1914. During these three years, 14 parcels were subdivided on Union Island, the majority of which was the subdividing of David Bixler Estate to his heirs following the patriarch's death in 1908. This event created small and large tracts, and 2,711 acres non-riparian land. Three severances totaling 51 acres occurred on Union Island north of the rancho grant line from 1914 to the 2008.

Subdivisions resulting in new non-riparian tracts on the former Rancho El Pescadero property of Union Island all took place after 1926. Some subdividing of land within the rancho grant had occurred in the early 1880s on the east side of Union Island and in the late 1890s on the west, but all remained riparian to Old River. The riparian status of this land remained unchanged, with no parcels becoming non-riparian to 1926. Between 1926 and 1963, however, subdivision resulted in seven parcels of 1,798 acres losing riparian status. Four more were added to this list between 1963 and 1969 for 465 acres, and eleven between 1979 and 2008 comprising 1,772 acres. **(MAPS 3A AND 3B)**

Table 1				
Summary of Non-Riparian Land on Union Island and Roberts Island				
	Total Acres	Number of Subdivisions Creating Non-Riparian Tracts	Acres Severed from Riparian 1890-1915	Total Non-Riparian Acres
Union Island	32,154	52	11,951	21,609
Roberts Island	32,879	176	12,286	24,008
Total	65,033	228	24,237	45,617

4. Conclusion

By 2008, the vast majority of the interior parcels on both Union and Roberts islands were no longer riparian to natural waterways by virtue of subdivision and ownership changes. Creation of non-riparian tracts began in 1859 with the first sale of S&O land from the State of California to private parties. Following S&O land sales, subdivision continued to the present. By 2008, a total of 228 subdivisions of property resulting in non-riparian parcels had occurred on both islands: 176 on Roberts Island and 52 on Union Island. In terms of area, this is approximately 45,617 non-riparian acres out of about 65,033 total

²⁶ Part of this land along Grant Line Canal was already non-riparian S&O land.

acres on both islands, or 70 percent. This breaks down as 24,008 non-riparian acres out of about 32,879 total acres on Roberts Island, or 73 percent; and approximately 21,609 acres of about 32,154 total acres on Union Island, or 67 percent.²⁷

²⁷ Total acreage is from: United States, Bureau of Reclamation, *Central Valley Project, California, Delta Lowlands Service Area Investigations*, Report Area DL-9 and DL-10 (Sacramento: Bureau of Reclamation Water Rights Engineering Branch, 1964). Current total acreage of Roberts and Union islands may be slightly different.

5. Bibliography

Books

- Bonte, Harmon S. *Financial and General Data Pertaining to Irrigation, Reclamation and Other Public Districts in California*. California Department of Public Works Bulletin No. 37. Sacramento: Division of Water Resources, 1930.
- Deering, F.P. and J.H. Deering, *Supplement to Deering's Codes and Statutes of California*. San Francisco: Bancroft-Whitney Company, 1889.
- Deering, F.P. *The Codes and Statutes of California*. San Francisco: Bancroft-Whitney Company, 1886.
- Gates, Paul Wallace. *Land and Law in California*. Ames, Iowa: Iowa State University Press, 1991.
- Tinkham, George H. *History of San Joaquin County, California*. Los Angeles, Historic Record Company, 1923.
- Thompson, John. *Tule Breakers*. Stockton: University of the Pacific, 1983.
- Thompson, John. "The Settlement Geography of the Sacramento-San Joaquin Delta, California." PhD. diss., Stanford, 1957, 193.

Government Documents

- California State Lands Commission. *Swamp and Overflow Lands Disposition Records. Roberts and Union Islands, 1859-1872*.
- California State Water Resources Control Board. Water Rights Division. *Water Appropriation Application Files. Union and Roberts Islands, 1917-1966*.
- San Joaquin County Recorder. *Swamp and Overflowed Lands, Volumes 1-3*.
- San Joaquin County Recorder. *Various Deeds, Union and Roberts Islands*.
- United States. Bureau of Reclamation. *Central Valley Project, California, Delta Lowlands Service Area Investigations. Report Area DL-9*. Sacramento: Bureau of Reclamation Water Rights Engineering Branch, 1964.
- United States. Bureau of Reclamation. *Central Valley Project, California, Delta Lowlands Service Area Investigations. Report Area DL-10*. Sacramento: Bureau of Reclamation Water Rights Engineering Branch, 1964.
- United States. Bureau of Reclamation. *Sacramento-San Joaquin Delta Water Rights Investigation Assumed Riparian Lands and Appropriative Rights, Study Area 20*. Sacramento: Bureau of Reclamation, 1972.
- United States. Bureau of Reclamation. *Sacramento-San Joaquin Delta Water Rights Investigation Assumed Riparian Lands and Appropriative Rights, Study Area 3*. Sacramento: Bureau of Reclamation, 1972.

Maps

- Budd, H.B. *Map of Reclamation District 544*. Stockton: H.B. Budd, 1913.
- Andrews, R.T. *Subdivision of the Wilhoit and Douglass Tract*. Stockton: Wilhoit, Eaton, and Buckley, 1911.
- Budd, Henry B. *Map of San Joaquin County, California*. Stockton: Budd and Widdows, 1926.
- Budd, Henry B. *Plat of the Holt Ranch*. Stockton: Henry B. Budd, 1910.
- Carlton, D.C. *Map of San Joaquin County, California*. Stockton: George E. Crane, 1904.
- County Plat and Directory Company. *San Joaquin County, California, Official Plat Book and Directory*. La Porte, Indiana: County Plat and Directory Company, 1966, 1969.
- Doughty, Frank. *Partition Map of the Lands of David Bixler Estate, Union Island, San Joaquin County, California*. [n.p.], 1913.
- Echo Map Company. *Agri-Land, San Joaquin County, Property Ownership Maps Plat Book and Guide*. [n.p.]: Echo Map Publishing Company, 1979, 1981, 1984, 1986, 1993, 1995, 1997, 2003, 2005.
- Gibbs, J.T. *Map Showing the Lands of the Tideland Reclamation Company*. San Francisco: Britton and Rey: 1869.
- Hall, William Hammond. *Topographic and Irrigation Map of the San Joaquin Valley, Sheet 1*. Sacramento: California State Engineering Department, 1886.
- Handy, H.P. *Index Map San Joaquin County*. San Francisco: H.P. Handy, 1862.
- Henkenius, J.C. *Stockton-Bellota Drainage District* (Sacramento: California Commissioner of Public Works, [ca. 1894].
- Manson, Marsden. *San Joaquin River: San Joaquin Bridge to Stockton*. Sacramento: State Engineering Department, 1882.
- Ohm and Raab. *Owners of Record Union Island Reclamation Districts 1 & 2*. Stockton: Ohm and Raab, 1921.
- Ohm and Raab. *Subdivision Map of the Lands of Henry Finck & Company on Union Island*. Stockton: Ohm and Raab, 1918.
- Quail, F.E. *Official Map of San Joaquin County, California*. Stockton: San Joaquin County, 1905.
- Reclamation District 2. *Union Island Reclamation District 2*. [n.p., ca. 1905]
- Reclamation District 684. *Map of Reclamation District 684, Lower Division of Roberts Island*. [n.p., ca. 1897].
- Reid, John C. *Map of the County of San Joaquin*. Philadelphia: S.B. Linton, 1883.

- Ringgold, Cadwalader. *General Chart of Embracing Surveys of the Farallones Entrance to the Bay of San Francisco*. Washington: Jno. T. Towers, 1852.
- San Joaquin County. Assessor's Office. *County Plat Book*. Stockton: San Joaquin County, 1979-1919, 2007, 2008.
- Smith, Julius. *Map of the Land of the Estate of T.H. Williams, Deceased*. [n.p., ca. 1889].
- Tideland Reclamation Company. *Fresh Water Tide Lands of California*. San Francisco: M. D. Carr and Company, 1869.
- United States. General Land Office. *Plat of the Rancho El Pescadero*. San Francisco: GLO, 1861.
- United States. General Land Office. Survey Map T1N/R5E, MDM. San Francisco: GLO, 1879.
- United States. General Land Office. Survey Map T2N/R5E, MDM. San Francisco: GLO, 1879.
- USGS. *Bethany Quadrangle*. Washington: USGS, 1914, 1952, 1968.
- USGS. *Byron Quadrangle*. Washington: USGS, 1916.
- USGS. *Clifton Court Forebay Quadrangle*. Washington: USGS, 1978.
- USGS. *Holt Quadrangle*. Washington: USGS, 1913, 1952, 1968, 1978, 1994.
- USGS. *Lathrop Quadrangle*. Washington: USGS, 1915, 1952, 1968, 1976, 1987, 1994, 1996.
- USGS. *Stockton Quadrangle*. Washington: USGS, 1913.
- USGS. *Stockton West Quadrangle*. Washington: USGS, 1952, 1968, 1976, 1987.
- USGS. *Union Island Quadrangle*. Washington: USGS, 1914, 1952, 1968, 1978.
- USGS. *Woodward Island Quadrangle*. Washington: USGS, 1913, 1952, 1968, 1978.
- USGS. *Woodward Quadrangle*. Washington: USGS, 1913.
- Wallace, John. *Map of the County of San Joaquin*. San Francisco: A.L. Bancroft & Company, 1870.
- Widdows, Charles H. *Map of San Joaquin County, California*. Stockton: Budd and Widdows, 1916.
- Widdows, Charles. *Map of Survey of California Packing Corp. of Property on Union Island, San Joaquin County, California*. Stockton: Charles Widdows, 1929.
- Widdows, Charles. *Topographical Map of Chas. Parker Hilt Ranch, Roberts Island, San Joaquin County, California*. [Stockton]: Charles Widdows, 1927.

Newspapers and Journals

Byron Times

Mining and Scientific Press

San Francisco Alta

San Francisco Bulletin

San Francisco Chronicle

Stockton Daily Independent

Stockton Record

Stockton Weekly Independent

Manuscript Collections

Augusta Bixler Farms Papers. California State Historical Society. Collection contains account books, lease agreements, correspondence, and yearly reports for this farm on Union Island.

Dietrich and Leistner Realtors Records. Holt Library Special Collections. University of the Pacific. Collection contains crops mortgages and lease agreements for certain parcels in the study area.

Roley E. Wilhoit Business Ledgers. Holt Library Special Collections. University of the Pacific. Collection contains account books for this real estate company which had holdings in the study area.

William Hammond Hall Papers. California State Archives. Collection contains survey field notes and maps for study area.

Online Sources

First American Real Estate Service. Online property ownership information database. Accessed February 2008.

San Joaquin County. Assessor's Office website. Accessed 2008 at <http://www.sjgov.org/assessor/>.

DWR Water Appropriation Application Files Notes to Compliment
Application File Data Table

Water Application Data Table Column Titles Explanation:

- “Area irrigated” refers to the area of use stated in the application;
- “Other right” refers to any other rights claimed on application besides the one applied for (usually Q #23 or Q#13 on Application);
- “Prior Irrigation” is the year and acreage of any irrigation previous to year of application indicated on any document in the file (usually Q #11 on Progress Report and Qs #14, #15, #16 on Application);
- “Riparian Claim” and “Pre-14 Claim” are any overt claims by the applicant;
- “Condition” is the presence of a condition on the permit or license—see below for text of Conditions;
- “Lic Season” is the season of use granted by the License.
- “Pump at POD” refer to pumps used to pump water over levee or raise water once inside levee at time of license.
- “Conditions” are as follows:

Condition #1

“As the right of the United States to control streams in the interests of navigation is superior to any other water right, this permit will in no way hinder the United States if it desires to stop this diversion under claim of its interference with navigation.”

Condition #2

“As there is a possibility that there will not be sufficient water in the [NAME OF STREAM] during the latter part of the irrigation season to satisfy all requirements, this permit is issued subject to the express condition that the use hereunder may be regulated by the Division of Water Rights during such periods of water scarcity to the end that such use will not interfere with rights under prior applications.”

Condition #3

“In case of rotation the equivalent of such continuous flow allowance for any thirty day period may be diverted in a shorter time if there be no interference with other vested rights.” (a.k.a. rotation clause)

Condition #4

“Allowance of the amount named in this permit shall not be construed as vesting in permittee any right or color of right to water in excess of what may be reasonably needed

for beneficial use in connection with the specific purpose described in the application which is hereby approved.”

Application Notes

732

Works: Applicant completed irrigation works by time of application (1917) consisting of a pipeline and ditches.¹ Works in December 1921 consisted of a tunnel through the levee to Grant Line Canal with a 24 in. pipe with a gate at the outlet end. Water runs through by gravity at high tide. There was a pumping plant at the head of the ditch on the property lifting the water 5 feet to irrigate the higher farmland. A second POD utilized a siphon pipe over the levee with a portable engine. A booster pump was located at the intersection of three ditches to distribute water to the northeast portion of the tract. Map from 1916 showing the works described in the application depict the POD at Grant Line Canal, irrigation ditches, and the booster pump. No drainage pumps or ditches shown.²

Crops: Water distributed by ditches and used Jan-Dec. Winter irrigation is of grain crops. Total area irrigated in **1921—598: 80 ac. in alfalfa, 80 ac. of beans, 438 ac. of barley.** The barley was irrigated only before sowing.³ 1922: 500 ac. of beans.⁴ Area irrigated in 1923 was 740: 572 ac. of beans, 58 ac. of alfalfa, 110 ac. of grain. The beans were irrigated by sub-irrigation and furrows; the alfalfa was irrigated in the summer after harvesting to help rot the seeds of weeds; the alfalfa land is flooded in the fall for the purpose of making duck ponds and preparing for fall sowing. The season of use is Mar-Oct.⁵

Elizabeth A. Bixler protested the application; she claimed riparian rights to Grant Line Canal in a letter.⁶

Letters in file discussing the status of Grant Line Canal as a navigable public waterway used by large and small boats. There seems to have been some dispute over the matter (1917).

3518

Crops: Application (1923) states that the crops to be irrigated were 200 ac. alfalfa, 20 ac. of orchard, and 350 ac. of general crops. **Applicant irrigated about 300 acres of grain in 1924 using water Sept. 13- Oct. 2.** No land irrigated in 1925. 300 acres irrigated in

¹ Water Appropriation Application 732, 12 July 1917, Application File 732, SWRCB.

² H.E. Linden, “W.H. Metson Tract, Union Island,” 1916, Application File 732, SWRCB.

³ Inspection Report, 28 December 1921, Application File 732, SWRCB.

⁴ Progress Report, 26 April 1923, Application File 732, SWRCB.

⁵ Inspection Report, 13 July 1923, Application File 732, SWRCB.

⁶ Virgil M. Airola to State Water Commission, 8 January 1918; State Water Commission to Irving Martin, 9 February 1918, Application File 732, SWRCB.

1926. Some water is used for stock watering. No land irrigated in 1927; 364 ac. irrigated in 1928. **The main crop is barley** and is heavily irrigated in August prior to seeding.

Works: Pump and motor installed in 1921. In 1924 pump house, pipe line, earth irrigation ditches completed. 1928—pump with intake and discharge pipe, concrete pit, earth ditch, water was opened onto the land at higher elevations and allowed to flood (“wild flood”) to lower. This land is uneven and it is about 14 feet above the average river surface. It was gradually being leveled. Water was pumped from river. Map shows a pump at the POD and a “drainage pump” at a different location.⁷

3701

Applicant claimed a “riparian right to the same supply.” In 1919 about 100 acres were irrigated “under permit.” (Q#11 Prog. Rpt) Letter to State Water Commission states, “water has been taken by pump from the river for this purpose (irrigation) for many years.”

Works: Application states that the works were completed except for the lateral ditches at the time of application (1923) and that the water was completely applied at that time. System described on app. consisted of a pump and ditch. In 1924, the point of diversion and main canal were complete, and checking and leveling of 40 acres for alfalfa. Works at time of inspection (1927) consisted of a pump, suction pipe, discharge pipe passing through the levee. The water empties into a concrete stilling pit and then flows through a flume to lateral ditches.

Crops: Water was to be applied to 30 ac. of alfalfa and 70 acres of general crops. Applicant’s maximum use was in September 1926. In **1927 there were 45 ac. of barley and 34 acres of alfalfa under irrigation.** Water for domestic and stock use is from a well.⁸

There is a deed in folder containing a transfer of water rights clause for the SJ River.

3905

Works: in place at time of application described as a pump and earth ditches. Applicant wrote in a letter dated 3 March 1924 to the DWR requesting information on obtaining a permit to operate irrigation works already in place in order to “comply with the law.” She writes that a new levee built “some years ago” blocked off her flood gate forcing her to install a pumping plant. In 1925 the applicant had a pump installed, ditches dug, and leveled some land and irrigated 15 acres. By 1926, lateral ditches complete, and 15 acres

⁷ Water Appropriation Application 3518, 10 July 1923; Progress Report, 30 December 1924; Progress Report, 11 January 1926; Progress Report, 15 January 1927; Progress Report, 20 January 1928; Inspection Report, 18 October 1928, Map, undated [1923], Application File 3518, SWRCB.

⁸ Water Appropriation Application 3701, 1 November 1923; Progress Report, 6 December 1924; Eugene F. Goodrum to Secretary, State Water Commission, 5 September 1923; Inspection Report, 11 July 1927; Application File 3701, SWRCB.

leveled and checked. Works at time of inspection in 1939 consisted of pump, concrete distribution box, and ditches.

Crops: In 1924, she irrigated 30 acres. That year she irrigated 10 ac. alfalfa, 5 ac. beans, 5 ac. corn from April 1 to September 1. **1927: 10 ac. alfalfa, 5 ac. beans, 5 ac. corn.** In 1929, 20 ac. of alfalfa irrigated from April through November. Permittee had 23 ac. alfalfa, 6 ac. tomatoes, 26 ac. barley in 1939.⁹

4071

Application states that construction of irrigation works was completed in the fall of 1918.

Crops: to be irrigated were grain, beans, etc. Irrigation would occur from March 1 to November 1. Applicant irrigated about 100 ac. in 1918. No land irrigated in 1926; 155 acres irrigated in 1925 from Sept. 1-Oct. 1. **In 1927, 27 ac. of corn, 138 ac. of barley; water use from April 15 to Nov. 15 (when beans were grown),** max use was in October. In 1931, irrigation done in Mar-May for summer crops and Sept-Oct for grain; ranch was half in corn, half in barley in this year.

Works: 1924 (app)—pump, earthen ditch, concrete inverted siphon. Water was pumped.¹⁰

For map see “Subdivision Map of the Lands of the Henry Finck Co. on Union Island...” 3/10/1919 in Book, Vol. 9 of Official Maps and Plats, p. 53. SJCo. Recorder

There is a copy of a deed in App. folder containing a water rights transfer clause.

Report of Inspection: The flow of Old River at this point is regarded as tidal; flow is from “east and west.”

4110

Crops: to be irrigated (1924) were “grain, asparagus, beans, potatoes, etc.,” watered from March 1 to November 1. No diversion necessary in 1925 due to sub-irrigation and late rains. **600 acres irrigated in 1926: 400 ac. of asparagus, 150 ac. of beans.**

Works: Application (1924) states that the construction of irrigation works was completed at time of application “and has been in use for several years.” It consisted of 10 inch pipe siphons over the levee. The diversions in 1927 was pipe siphons as the land is lower than the water level; water dispersed by earth ditches. Map of parcel from 1924 shows

⁹ Water Appropriation Application 3905, 14 March 1924; Jennie H. Brown to DWR, 3 March 1924; Progress Report, 24 December 1926; Progress Report, 22 December 1925; Progress Report, 16 November 1929; Progress Report, 26 November 1927; Application File 3905, SWRCB.

¹⁰ Water Appropriation Application 4071, 7 July 1924; Progress Report, 10 January 1927; Progress Report, 20 December 1925; Progress Report, 12 December 1927; Inspection Report, 26 September 1928; Report of Licensee, November 18, 1931, Application File 4071, SWRCB.