



State of California • Natural Resources Agency

Gavin Newsom, Governor

DEPARTMENT OF PARKS AND RECREATION
P.O. Box 942896 • Sacramento, CA 94296-0001
(916) 653-7423

Armando Quintero, Director

January 15, 2025

Clarence Chu
RD 369, P.O. Box 987
Walnut Grove, CA 95690
ckchu52@comcast.net

RE: Locke Multi-Benefit Flood Risk Reduction Planning Project
State Clearinghouse Number 2024120741

Dear Mr. Chu,

This letter provides comments by the Diablo Range District of the California Department of Parks and Recreation (State Parks) on the Reclamation District 369 (RD 369) Initial Study/Mitigated Negative Declaration (IS/MND) for the Locke Multi-Benefit Flood Risk Reduction Planning Project. Under the California Environmental Quality Act (CEQA), State Parks has a dual role as both a Trustee and a Responsible Agency. As a Trustee Agency, State Parks is responsible with protecting lands that are held in trust for the people of the State of California.

A large portion of the proposed project will occur within the State Parks Delta Meadows unit. The IS/MND identifies that a right of entry permit will be needed from State Parks to cover “geotechnical explorations and pipeline removal/replacement.” All other scope items within the Delta Meadows property, excluding those covered by the existing easement for the under-levee pipeline, will also need to be covered under this permit, including vegetation trimming and removal, gravel replenishment, and re-seeding of levee slopes within the park.

The IS/MND reports that impacts to recreation will be less than significant long term; however, the impacts to recreation within the park while work is underway appear to be substantial, and will need to be more fully described and addressed through the right of entry permit as well, including traffic control plans and the specific locations and durations of trail closures.

The IS/MND also states that once the project is complete, ongoing operation and maintenance of the levee will need to routinely take place, including vegetation management and removal. RD 369 has separately submitted a request to establish a permanent easement on the property to grant rights for this operation and maintenance activity. Until such a time that an easement is in place, RD 369 will need to continue to work with, and receive approval for, any and all operation and maintenance work not covered in the existing easement, either through a right of entry permit or memorandum of understanding. This comment letter does not authorize issuance of a permit, or permanent or temporary easement, or indicate that any type of permit or easement will be granted. Additional review and approval by State Parks will be needed and will likely

require additional information about proposed project activities to aid our evaluation of potential impacts within State Parks property. You are encouraged to initiate all necessary permits and agreement negotiations with State Parks as early in the project planning process as possible.

The IS/MND states that if cultural resources are discovered during the project-related activities, then activities around the discovery shall stop until they are evaluated, and RD 369 will be notified. If the discovery is on the Delta Meadows property, State Parks should also be notified and consulted prior to any continuation of ground disturbance, and State Parks should also review and consult on any proposed treatment plan.

The IS/MND should also incorporate the findings of the attached DPR523 form for the Delta Meadows Levees. Although concurrence has not yet been received by the State Historic Preservation Officer, we are assuming eligibility.

The IS/MND specifies that RD is responsible for special status species surveys, avoidance, and mitigation. For activities within the Delta Meadows property, RD 369 or its contractors should provide advance notice to State Parks when surveys are scheduled, provide survey results, and consult with State Parks if impacts cannot be avoided. The IS/MND includes payment into offsite mitigation banks as an option to achieve mitigation, however, impacts to natural and cultural resources within State Park units should be mitigated within the park unit where impacts occur in order to return park property and/or resources to a pre-project condition or better with the mitigation activities paid for by the project proponent. As you obtain required agreements/certification/permits, we encourage you to work with regulatory agencies to develop a mitigation framework for this project that will compensate State Parks for impacts to park property and the costs the department would incur to mitigate impacts, including those associated with increased invasive species management, permanent loss of native vegetation, and restoration of impacted native habitats and communities.

If you have any questions about this comment letter or would like to discuss project activities on State Parks property, please contact Diablo Range District Planner, Megan Harrison, at 925-321-5851 or megan.harrison@parks.ca.gov.

Sincerely,


Clinton Elsholz
Diablo Range District Superintendent

Cc: Emily Pappalardo, epappalardo@dcceng.net

Attachment: DPR523

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-34-005794

HRI # _____

Trinomial _____

NRHP Status Code 6Z

Other Listings _____

Review Code _____

Reviewer _____

Date _____

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*Resource Name or # (Assigned by recorder) South Field

P1. Other Identifier: _____

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Isleton and Courtland Date 2021/2022 T 5 North; R 4 East; 1/4 of Sec 25 and 26; Mount Diablo Meridian

c. Address: _____ City: Locke zip: 95690

d. UTM: (give more than one for large and/or linear resources) Zone 10S; 630754 mE / 4234426 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Assessor Parcel Numbers (APN): 146-0150-001, 146-0150-005, and 146-0150-010

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This form records and evaluates the built resources within a former agricultural field located in Delta Meadows State Parks Property (Delta Meadows; Property) (**Photograph 1** and **Sketch Map**). The area is identified as “South Field” because of its location at the south end of the Property. The approximately 40-acre field is bounded on the north by a levee along Locke Slough, on the south by a levee along the Delta Cross Channel, on the west by the former Southern Pacific Walnut Grove Branch railroad embankment, and on the east by a north-south access road that separates the field from land owned by the U.S. Bureau of Reclamation (USBR). Agricultural production in the field ceased in 1991, and the fallow field has since revegetated with grasses, shrubs, and trees. It currently contains remains of drainage related structures (ditches and a pumping station), an abandoned natural gas well pad, and two large concrete anchor blocks for guywires that stabilize an antenna tower located on the USBR property. While this form documents the anchor blocks, it does not evaluate them, as they are integral to the antenna structure on USBR land, and the evaluation of the tower is outside the scope of this project. (see Continuation Sheet).

*P3b. Resource Attributes: (List attributes and codes) HP32: Rural open space

*P4. Resources Present: ☐ Building ☒ Structure ☐ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)

Photograph 1: Drainage ditch in southeast corner of South Field; facing northeast, February 8, 2024.

*P6. Date Constructed / Age and Sources:
☒ Historic ☐ Prehistoric ☐ Both
1877–1963 (E. E. Tucker, Field Notes, Book 95, 1878).

*P7. Owner and Address:
State of California
Department of Parks and Recreation
1416 9th Street
Sacramento CA 95814

*P8. Recorded by: (Name, affiliation, address)
David Hickman and Andrew Young
JRP Historical Consulting, LLC
2850 Spafford Street
Davis, CA 95618

*P9. Date Recorded: February 8, 2024

*P10. Survey Type: (Describe) Intensive

*P11. Report Citation: Scher, Naomi and David Hickman (2024) Cultural Resources Inventory for Delta Meadows State Property, Sacramento County, CA.

*Attachments: ☐ None ☐ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record
☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list)

DPR 523A (1/95)

*Required Information

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*NRHP Status Code 3S

*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

B1. Historic Name: Odell Ranch levees; RD 554 Levee; Southern Pacific Railroad, Walnut Grove Branch Line; Locke Levee or Fountain Levee; RD 551 Levee and Berm

B2. Common Name: Delta Meadows levees

B3. Original Use: Levee B4. Present Use: Levee / Abandoned

*B5. Architectural Style: n/a

*B6. Construction History: (Construction date, alteration, and date of alterations). House Knoll and Slough Levees likely constructed in early to mid-1870s; SLS 764/877 Levee constructed 1875 –1876, breached and abandoned in 1890s; RD 544 Levee constructed in 1890s; Railroad Embankment constructed 1908–1912; Locke Levee constructed circa 1912; RD 551 Levee Berm constructed 1917

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: n/a Original Location: n/a

*B8. Related Features: n/a

B9. Architect: n/a b. Builder: Odell; RD 554; Southern Pacific Railroad; Locke; and RD 551

*B10. Significance: Theme Reclamation Area Sacramento-San Joaquin Delta

Period of Significance 1870–1917 Property Type Levee System Applicable Criteria NRHP/CRHR Criteria A/1

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Delta Meadows Levee Complex evaluated on this form is eligible for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR) under Criteria A/1 as an important example of late-nineteenth and early-twentieth-century reclamation efforts within the Sacramento-San Joaquin Delta. The period of significance runs from the start of levee construction around 1870 through to 1917 when the final levee within the Property was completed. None of the levees are independently eligible for listing in the NRHP and/or the CRHR as the complex's significance arises from the collection of levees built to meet a variety of circumstances encountered in turn-of-the-century reclamation. Neither the levee complex as a whole, nor any of the individual levees, are eligible for designation as California Historical Landmarks. The Delta Meadows Levee Complex is a historic property under Section 106 of the National Historic Preservation Act, and a historical resource for the purposes of the California Environmental Quality Act (CEQA). The resources were also evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code (see Continuation Sheet).

B11. Additional Resource Attributes: _____

*B12. References: E. E. Tucker, Field Notes, Book 92, 1878, State Engineering Department Records (William Hammond Hall Collection), California State Archives, Sacramento; John Thompson, "The Settlement Geography of the Sacramento-San Joaquin Delta, California," (PhD diss., Stanford University, 1957; and see footnotes.

B13. Remarks:

*B14. Evaluator: David Hickman

*Date of Evaluation: May 2024

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

P3a. Description (continued):

Table 1: Levee feature IDs, dates (P6.), and UTM coordinates (P2D.)

Feature ID	Name	Date Constructed	UTM Coordinates (all Zone 10S)
A	House Knoll Levee	1870s	NW: 630730 mE / 4234986 mN; SE: 630751 mE / 4234927 mN
B	Slough Levee	1870s	NW: 630676 mE / 4234873 mN; SE: 630706 mE / 4234932 mN
C	SLS 764/877 Levee north segment south segment	1875–1876	NW: 631091 mE / 4236481 mN; SE: 631278 mE / 4236351 mN N: 631209 mE / 4235472 mN; S: 631108 mE / 4234807 mN
D	RD 554 (Walnut Grove) Levee	1890s	W: 630637 mE / 4234625 mN; E: 630950 mE / 4234679 mN
E	RR Embankment north segment south segment	1908–1912	N: 631604 mE / 4237589 mN; S: 631459 mE / 4236432 mN NE: 631325 mE / 4236134 mN; SW: 630490 mE / 4234325 mN
F	Locke Levee	ca. 1912	NW: 630425 mE / 4236188 mN; SE: 631016 mE / 4235516 mN
G	RD 551 (Pearson) Levee Berm	1917	NE: 631426 mE / 4236988 mN; SW: 630428 mE / 4236181 mN

The levee is approximately four to five feet high and has an eroded, rounded crown width of about 12 feet. The levee remains distinctly visible on the grazed lands of Locke Ranch, immediately west of the Property boundary (**Photograph 2**). Within the Property, the levee shape is less easily discerned, being partially covered by sapling tree growth. However, its location, route, and rough dimensions are still detectable.

Feature B, identified in this form as “Slough Levee,” is located approximately 350 feet south of the House Knoll Levee (**Photograph 3**). The levee runs northwest along a stretch of marshy land that wraps around the south and west sides of the house knoll. The marshy land appears to be the remnants of a natural slough that previously drained to the southeast but was cut off by construction of the railroad embankment. Topographic mapping based on surveys conducted in 1906 showed a constructed levee on the southwest side of the marshland and natural high ground on the northeast side. However, a physical examination of the features today does not support an easy separation into constructed and natural, as both banks are of similar appearance and are largely covered by vines, sedges, and other growth. Both banks have similar dimensions to Feature A, being approximately four to five feet high, with a crown width of approximately 12 feet. A collapsed footbridge previously spanned the slough near the west Property boundary (**Photograph 4**). By appearance, the footbridge was not of historic age, but was a more recent addition.

Feature C consists of two segments of levee constructed along the north boundary of Swamp & Overflowed Land Survey (SLS) No. 764 and the east boundary of SLS 877 (**Photograph 5; Sketch Map**). The discontinuous levee segments (presumed to have been previously connected) are both heavily overgrown with blackberry brambles and poison oak. Mature oaks and willows grow on top of the levees, where the slight elevation protected them from flooding. The terrain and vegetation cover did not permit a direct examination of these features, but when viewed by boat from the adjacent waterways, they present as low mounds, approximately four to five feet high with a crown width of between eight and twelve feet. The levees are most readily detected in aerial photographs, where they appear as unnaturally straight lines of mature trees that are taller than the surrounding vegetation (**Photograph 6**).

Feature D is a section of levee built, owned, and maintained by Reclamation District (RD) 554, commonly known as the Walnut Grove district. Approximately 1,000 feet of the levee are located within Delta Meadows, running from the railroad embankment at its west end to the Property boundary at its east end (**Photographs 7 and 8**). The recorded segment is located on the south bank of Locke Slough, a dredger cut, approximately 140-foot wide that was created in constructing the levee. The levee continues east along the slough past the Property boundary and then south along Snodgrass Slough, before turning west along the north bank of the Delta Cross Channel. The levee rises approximately 15 to 20 feet above the surrounding land and water levels. The rounded crown has an approximate width of 30 feet and is topped with a dirt road that averages 15 feet wide. Modern galvanized metal gates are located at both the east and west ends of the recorded segment, though at the time of survey, the west gate was no longer serviceable as the metal post had been pulled from the ground and both post and gate lay on the

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update

north levee slope. The east five-rail gate includes a no-trespassing sign posted by RD 554 (**Photograph 9**). A row of cottages previously lined the north levee slope, adjacent to Locke Slough. The cottage remnants are recorded separately.

Feature E is an embankment or berm that formerly carried the Walnut Grove Branch Line of the Southern Pacific Railroad (**Photograph 10**). The embankment was not designed as a flood control levee, but it serves that function for Locke Ranch, the town of Locke, and the agricultural lands along the northeast boundary of Delta Meadows. The embankment is in two segments divided by Snodgrass Slough. The southern 1.25-mile segment is located west of the slough and east of Locke Ranch and the town of Locke. The southern 1,200 feet of this segment has dry land on both sides and runs from near the Delta Cross Channel gate at its south end to the junction with the RD 554 Levee at its north end. The remainder of the south segment runs along the west bank of Railroad Slough, a dredger cut created in constructing the embankment. The cut varies in width between 115 and 225 feet. The north 0.8-mile segment of the former railroad berm is on the east bank of Snodgrass Slough and runs from the slough crossing at its south end to Twin Cities Road at its north. The embankment averages 16 feet in width and rises approximately 15 to 20 feet above the surrounding ground and water surfaces. The south segment has a generally even and level surface while the north segment is more irregular, characterized by undulating and uneven terrain (**Photograph 11**). Note that the Walnut Grove Branch Line between Sacramento and Walnut Grove was previously evaluated and found eligible for listing in the NRHP/CRHR for its association with the development of the region and for embodying the distinctive construction methods of its era. The California State Historic Preservation Officer (SHPO) concurred with the finding of eligibility in 1991 and the resource is listed in the CRHR.¹ It is recorded and evaluated here as a component of the Delta Meadows Levee System.

Feature F, identified in this form as “Locke Levee,” runs along the northeastern boundary of Locke Ranch between the railroad embankment at its southeast end and a levee belonging to RD 551 at its northwest end. The levee is approximately 3,000-feet long, 20-feet high, and has a crown width of 12 feet. The levee has a slight angle near its midpoint, deflecting the levee in a more northerly direction compared to the southeast end of the levee which has a general northwest-southeast orientation. The southeast segment of the levee runs between grazed fields with some seasonal wetlands on the northeast side of the levee. Vehicles drive along the levee crown of this segment, and it shows tire tracks, though it is not fully developed as a dirt road (**Photograph 12**). The northwest segment has the Meadows Slough dredger cut on its northeast side and a drainage ditch and dredger cut on the southwest side. A narrow foot trail that runs along the levee crown is covered in heavy vegetation (**Photograph 13**). A metal pipeline lays across the levee near the midpoint, connecting the drainage ditch and dredger cut. An older pipe that passed through the levee, just below the crown, appears to have been abandoned at a recent date and replaced with the current pipe that lies atop the levee (**Photographs 14 and 15**).

Feature G is a 100-foot-wide berm constructed on the southeast side of the RD 551 (Pearson District) levee (**Photograph 16**). The levee itself is located just beyond the Property boundaries. Designed to prevent wave erosion on the levee face, the berm lies between the outer levee toe and the Meadows Slough dredger cut. The berm has an outer elevation of 10 feet above mean high tide and slopes up gently to 12 feet at the levee toe. Crews planted the berm with willows to protect against wave wash and it has since been naturally revegetated by species from the surrounding area, as well as being intentionally planted with redwoods, fruit trees, and grape vines. Informal docks and small-scale recreational features located along the berm were recorded separately (**Photograph 17**).

B10. Significance (continued):

The Delta Meadows Levee Complex consists of a rare grouping of diverse levees from the late-nineteenth and early-twentieth century concentrated within a small 472-acre Property. The heart of the Property is formed by an interlocking network of tidal sloughs flowing past islands of emergent wetland vegetation beneath overhanging canopies of oaks and willows. This natural landscape contrasts strongly with the surrounding farm fields and narrow, often channelized, rip-rap-lined river channels. In popular presentations, Delta Meadows is regularly cast as a land forgotten by time and bypassed by history, with the sloughs

¹ Mary L. Maniery, PAR Environmental Services, “Significance Evaluation of Walnut Grove Branch Line Railroad, Sacramento County, California,” prepared from US Army Corps of Engineers, April 30, 1991.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update

and marshes thought to be largely unchanged since before European settlement. In fact, the levee remains within the Property embody a complex history of reclamation efforts, both successful and failed, that have thoroughly transformed the landscape more than once. Most of the natural-seeming sloughs were actually created by large, steam-powered dredgers, and the wetlands are all second-growth features that emerged only at the start of the twentieth century following the failure of earlier reclamation projects. The Delta Meadows Levee Complex encapsulates this multifaceted history and offers an important interpretive tool for understanding aspects of the nuanced complexity of reclamation in the California Delta.²

Historic Context

Setting

The Sacramento-San Joaquin Delta was once the largest wetland system on the U.S. Pacific Coast, encompassing some 780,000 acres of marshy islands, tidal sloughs, and riparian corridors. Within the last 175 years, reclamation has thoroughly transformed the Delta, converting it into productive farmland secured behind massive levees. Today, 97 percent of the original tidal wetlands have been lost and only scattered fragments of preserved or restored marsh can be found.³

Delta Meadows is located within the north Delta region, an area originally characterized by large flood basins set behind the natural levees of the Sacramento River (**Figure 1**). The Sacramento River channel is of insufficient size to carry its full winter and spring flood flows, so the river historically overtopped its banks, spilling water into the back basins during high flows. As the flood waters spread on adjacent land they slowed and deposited their sediment, gradually building up berms of higher land, up to 10 feet tall, along the riverbanks. Behind these natural levees sat deeper basins, often several miles wide by dozens of miles long, that held and absorbed the seasonal floodwaters and sustained perennial wetlands.⁴

Delta Meadows boasts an unusually expansive area of highlands, a topographic feature attributable to the area's aeolian (wind-deposited) soils, versus the predominant alluvial (river-deposited) soils though the remainder of the Delta. The General Land Office (GLO) surveyor William Lewis measured this band or peninsula of wooded highlands in 1859 as being six chains wide by 20 chains long (396 feet by 1,320 feet). This band today extends through Locke Ranch and into the northwest corner of the Property, south of Meadows Slough. It

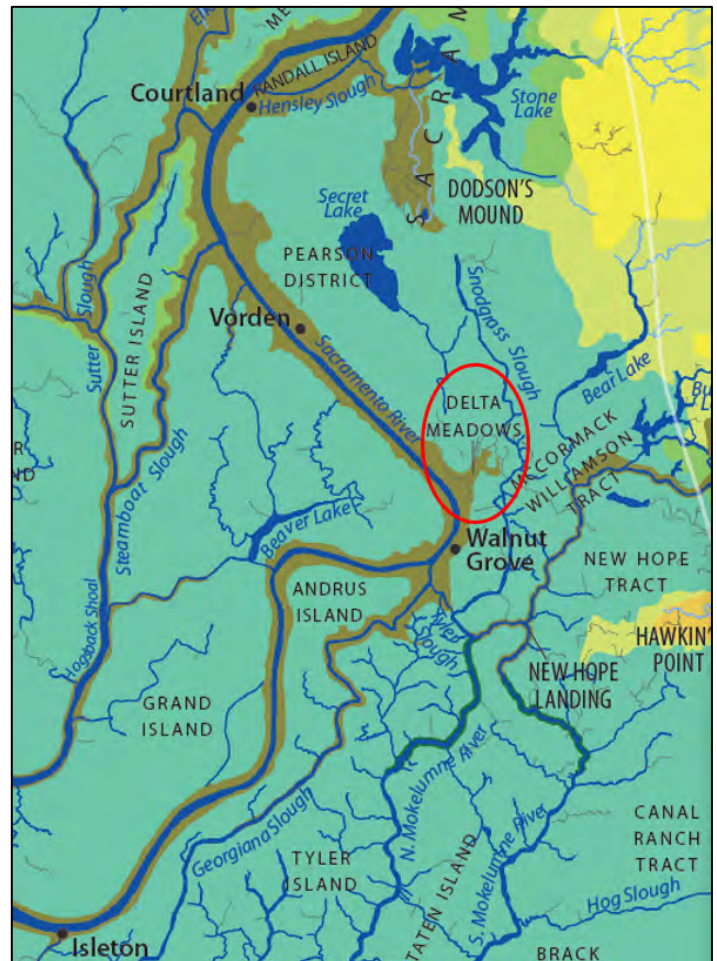


Figure 1: The north Delta area in its pre-reclamation state was characterized by wide swaths of tidal freshwater wetlands (green), with riparian belts (brown) on the natural river levees. Note the peninsula of highland in the Delta Meadows area (circled in red).⁵

² On the popular presentation of the Property as unchanged by time, see, for example, “Can You Canoe? You’ll Want To,” *Sacramento Bee*, March 26, 2009, L-3; Integrative Graduate Education and Research Traineeship, Seminar on the California Delta, accessed May 2024 at <http://www.igert.org/highlights/132/image/328.html>; and Erle Stanley Gardner, *The World of Water: Exploring the Sacramento Delta* (New York: William Morrow & Company, 1965).

³ San Francisco Estuary Institute, Aquatic Science Center (SFEI ASC), “Sacramento-San Joaquin Delta Historical Ecology Investigation: Exploring Pattern and Process,” Prepare for the California Department of Fish and Game and Ecosystem Restoration Program, August 2012, xv.

⁴ SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 207–211, 221–214.

⁵ SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 209.

is visible on the **Sketch Map** as a strip of pasture (brown on the aerial image) surrounded by lower lying, green marshlands. Snodgrass Slough, on the east side of the Delta Meadows site, is subject to tidal influence, allowing water to surge through the basin twice daily, while also draining the seasonal floodwaters.⁶

The tidal wetlands between Snodgrass Slough and the higher peninsula are a relatively recent phenomenon. Soil core samples suggest that the area developed persistent intertidal wetlands only about 300 years ago as sea levels rose. This means that when John Sutter arrived in California in 1839, the Delta Meadows wetlands were barely a century old. The soils in these areas thus had comparatively little organic material and were not as productive for growing asparagus, potatoes, onions, and other traditional Delta crops as were the deep peat soils of the central Delta islands. However, the denser soils were better for levee building, which may account for the survival of early levees within the Property.⁷

Settlement

The first American settlements in the Delta followed the line of natural levees that flanked the Sacramento River. Wood cutters harvested the riparian forests, selling cord wood to steamboats for fuel, and settlers cleared small gardens in anticipation of claiming preemption rights to the land. Orchards proved particularly adapted to the strip of high land through the Sacramento Delta, and fruit trees eventually replaced most of the original riparian belt of willows, sycamores, and oaks. The area was well served by transportation networks as steamboats made regular landings and stage lines connected Walnut Grove and Sacramento. Prosperous farms came to line both banks of the Sacramento River, and by the 1860s, the region was a principal supplier of fruits and vegetables for the San Francisco markets.⁸

Early reclamation efforts in the area focused on preventing loose plowed earth from washing off the natural levees, rather than preventing the backlands from flooding. When the Sacramento River reached peak flows in the late spring, it overtopped its banks for a period of days or weeks and easily eroded land that had been cleared for cultivation. At first, levees erected atop the natural riverbanks needed only to be a few feet high to enclose the adjacent fields to prevent the worst damage during moderate spring floods and by 1853, levees were common along the east bank of the Sacramento River. Individual settlers designed and built the levees and drainage ditches to meet their own particular needs, so heights and slopes varied greatly. Gradually, efforts toward greater integration resulted in a general, albeit discontinuous, line of levees from Freeport to Walnut Grove. Property owners often hired Chinese, native Californian, and Hawaiian laborers, who used shovels and wheelbarrows, to perform most of the digging and mounding needed to create these “shoestring” levees.⁹

No attempt was made through the 1850s to construct a back levee to keep floods out of the basin interiors. Settlers restricted their improvements to the higher lands and used the marshes only as hunting grounds and summer pasture for cattle. Water backing up the sloughs rarely threatened their fields, so they tolerated the seasonal inundations.¹⁰

Reclamation Policy, 1850–1865

Difficulties in securing title to the swamplands also dissuaded settlers from attempting costly reclamation. Under the terms of the 1850 Swamp Lands Act (also known as the Arkansas Act), the federal government granted to the states the so-called “swamp and overflowed” (S&O) lands, being those properties deemed “unfit for cultivation” without reclamation by leveeing and draining. Federal survey was required to identify S&O lands prior to transferring them to the state, but in California,

⁶ SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 218–219.

⁷ SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 218–219, 287; K. T. Brown and G. B. Pasternack, “A Palaeoenvironmental Reconstruction to Aid in the Restoration of Floodplain and Wetland Habitat on an Upper Deltaic Plain, California, USA,” *Environmental Conservation*, Vol. 32, No. 2 (June 2005), 103–116.

⁸ John Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta, California,” (PhD diss., Stanford University, 1957), 139–144; E. E. Tucker, Field Notes, Book 92, 1878, 38–40, State Engineering Department Records (William Hammond Hall Collection), California State Archives, Sacramento.

⁹ Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta,” 210–213; E. E. Tucker, Field Notes, Book 95, 1878, 1

¹⁰ E. E. Tucker, Field Notes, Book 92, 1878, 41; SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 222.

settlement commonly preceded any official surveying. In the Delta Meadows area, the federal survey occurred in 1859, a decade after the first woodcutters established camps on the riverbanks.¹¹

The state determined under what terms S&O lands could be acquired and reclamation accomplished and, initially, the California legislature favored laissez-faire methods of reclamation. The provisions of the first S&O act in 1855 allowed buyers to purchase up to 320 acres at \$1 per acre. Purchasers were required to have the land mapped by the county surveyor, but they were free to determine a plan of reclamation and had no obligation to integrate their levee systems with those of surrounding properties. No Delta Meadows properties were claimed under these early provisions.¹²

The politics of the Civil War greatly altered swampland policy in California, though the changes proved short lived. Small-government (and generally secessionist-sympathizing) Democrats were temporarily replaced by Republicans who favored bold, systematic state action to reclaim swamplands on a vast scale. In 1861, the new legislature created the Board of Swampland Commissioners to assume responsibility for reclamation at a state level, rather than having it left to the discretion of individual landowners. Engineers, not farmers, would plan the works of reclamation, and these were to be constructed to encompass entire natural drainages, rather than individual properties. Upon receipt of a petition representing owners of one-third of the acreage within a flood basin, the state board could authorize a “swampland district.” The district could then use the funds raised by the sale of swamplands to plan and construct a single system of levees and drainage features to complete reclamation through the entire district.¹³

Swampland District No. 2

The state board organized Swampland District No. 2 on May 30, 1861, to reclaim the entirety of the Sacramento Basin, including Delta Meadows. The district contained all the S&O lands east of the Sacramento River from the American River, north of Sacramento, to Tyler’s slough and the Mokelumne River, south of Walnut Groove. Twenty miles long and several miles wide, the district contained nearly 70,000 acres and would require 48 miles of levee on the Sacramento River alone. The \$1 an acre raised by the sale of swampland was nowhere near sufficient to pay for such a grand plan. As late as 1866, the district had managed to construct levees only a short distance below Freeport and was heavily in debt. The failure of Swampland District No. 2 to realize its goals was symptomatic of the overreach of the Board of Swampland Commissioners era. Of the 28 districts established by the board, all but one ran out of money and ceased operations well short of their objectives.¹⁴

Early Landowners

While Swampland District No. 2 could not meet its lofty ambitions, the organization of the district furthered settlement in the region by prompting farmers and speculators to file for the Sacramento Basin swamplands in anticipation of their eventual reclamation. Within the Delta Meadows area, three purchasers– Ritner Dodson, Harris W. Odell, and Joseph Wise–accounted for most of the S&O acreage (**Table 2** and **Figure 2**).¹⁵

¹¹ Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta,” 185–186; SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 64.

¹² Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta,” 187–189; SFEI ASC, “Sacramento-San Joaquin Delta Historical Ecology Investigation,” 64.

¹³ Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta,” 196–198; Robert Kelley, *Battling the Inland Sea: Floods, Public Policy, and the Sacramento Valley* (Berkeley: University of California Press: 1989), 40–50; David Vaught, *After the Gold Rush: Tarnished Dreams in the Sacramento Valley* (Baltimore: John Hopkins University Press, 2007), 119–120.

¹⁴ Kelley, *Battling the Inland Sea*, 50; “Swamp Land Commissioners,” *Sacramento Bee*, July 26, 1861, 2; “Canal to Snodgrass Slough,” *The Sacramento Bee*, February 17, 1866, 2; “Swamp Land Commissioners,” *Sacramento Daily Union*, May 8, 1873, 3.

¹⁵ Kelley, *Battling the Inland Sea*, 50–53; Vaught, *After the Gold Rush*, 120.

Table 2 S&O Land Surveys (SLS) in Delta Meadows area.

SLS	Purchased	Patented
757	Nov 15, 1862 H. W. Odell	Replaced by SLS 877
763	Nov 4, 1862 Joseph Wise	Jan 18, 1879 Joseph Wise
764	Mar 2, 1863 Ritner Dodson	June 29, 1869 Garland Adams
796	Dec 3, 1864 Joseph Wise	Jan 18, 1879 Joseph Wise
877	Mar 12, 1868 H. W. Odell	Aug 18, 1873 H. W. Odell
1000	Aug 6, 1869 George W. Doherty	Jun 1, 1907 Southern Pacific Co.
1021	Nov 18, 1871 W. O. Slade	May 7, 1892 Duncan McNee



Figure 2: The approximate locations of the SLS claims are shown on a modern aerial photograph. The Delta Meadows SP boundaries are outlined in orange.

Ritner Dodson was one of three Pennsylvanian brothers to settle on the Sacramento River banks in the 1850s. Ritner purchased the 390-acre S&O Land Survey (SLS) 764 in November 1862. He farmed the land along with his younger brother, Nelson, while their widowed mother kept house. Their older brother, Jasper Dodson, worked the neighboring 300-acre property to the south (**Figure 3**). This land later became the core of the Locke Ranch and today contains the Locke townsite. Jasper Dodson constructed a two-story brick house on the highland knoll at the center of the property and ran cattle in the pasture and marshlands. In 1862, he became unable to meet the terms of his mortgage and lost his land at a sheriff's sale. The remainder of the Dodson family left the Delta area several years later after Ritner Dodson sold his land to Garland Adams.¹⁶

¹⁶ "Sheriff's Sale," *Sacramento Bee*, December 13, 1862, 4.
DPR 523L (1/95)

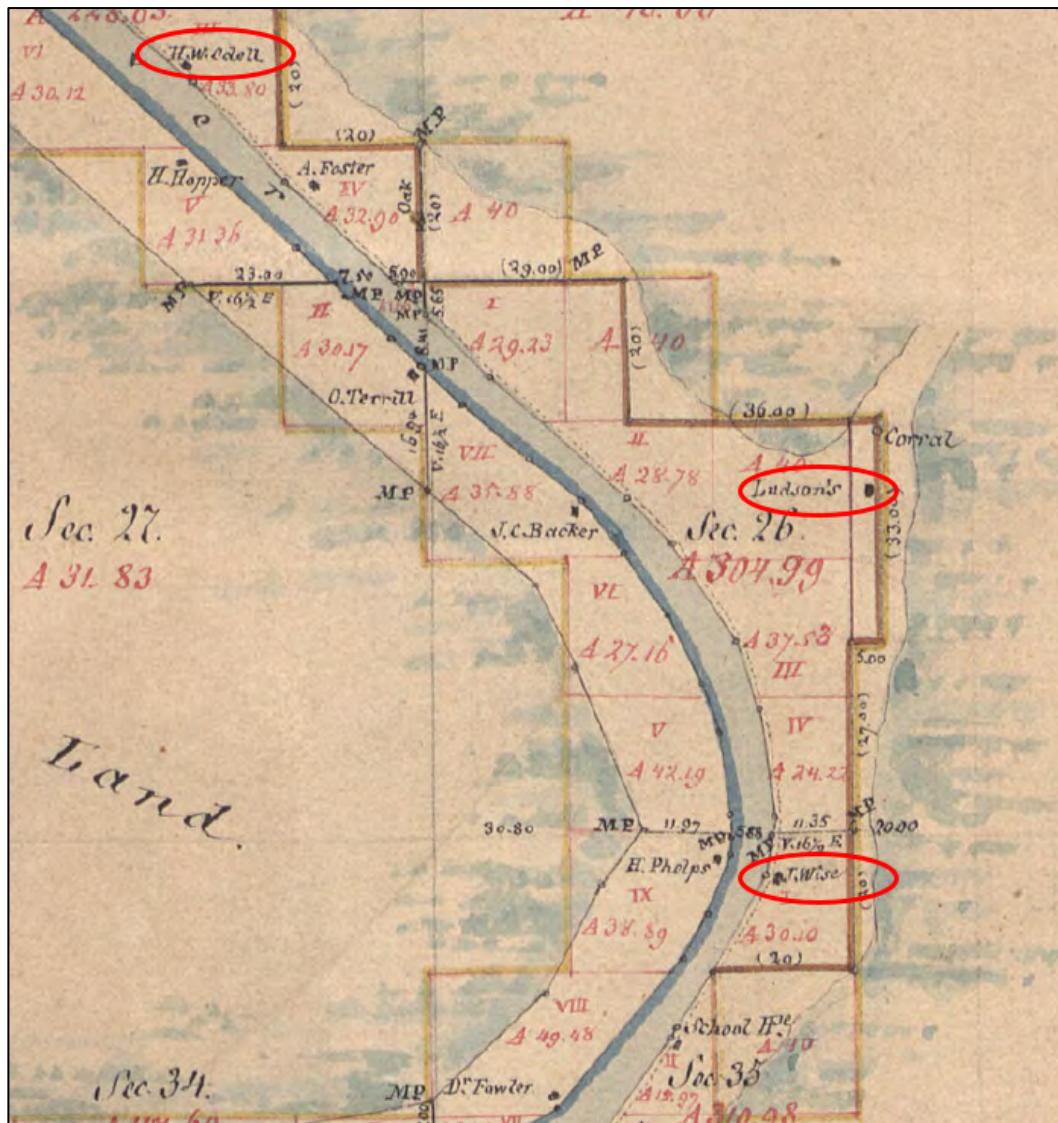


Figure 3: An excerpt from the 1859 GLO township survey shows the raised natural levees along the Sacramento River surveyed into parcels, with S&O land in the basins indicated by blue shading. At the time, Odell lived north of Delta Meadows in Section 22, Township 5 North, Range 4 East. The residence and corral of Jasper Dodson (misidentified as “Ludson”) were depicted on the highlands in Section 26, on what later became the Locke Ranch. Joseph Wise was located further south in Section 35.¹⁷

Harris Ward Odell, originally of New York, had lived in the district since 1857, residing on a small riverbank farm north of Delta Meadows. In November 1862, he filed a swamp land claim (SLS 757) to the Jasper Dodson ranch in anticipation of the mortgage default. His filing became entangled in the courts as several parties claimed to be the rightful owner of the land. Odell lost the initial court fight and was obliged to refile for the swampland in 1868 with SLS 877, which excluded the contested land. However, he later managed to purchase the Dodson lands and reconsolidated the property. Odell would go on to assemble a much larger ranch, including the Ritner Dodson parcel and several additional properties further north. By 1876,

¹⁷ William Lewis, GLO, Township No. V North, Range No. IV East, Mt Diablo Meridian, June 18, 1859.

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Odell ranked among the largest landowners in Sacramento County, but ultimately, he was unable to keep up with the debt and tax payments and had to sell the ranch in pieces.¹⁸

Among the early settlers, Joseph Wise was the only one to make the Delta his permanent home. Originally from Cape Girardeau, Missouri, Wise moved to California in 1852. He mined in El Dorado County for half a year, without result, and moved to the Delta in 1853. He labored on a riverbank farm for three years before buying out the owner's interest in 1856. In the early 1860s, he added to the property by filing two S&O claims for the swampland behind the farm: the 147-acre SLS 763 and the 158-acre SLS 796. He tended an orchard for 15 years but then concentrated on growing beans and grain crops on the back acreage. Wise lived on the farm until his death in 1914 and his children continued to live on nearby properties for at least another decade.¹⁹

Reclamation Policy, 1866–1917

In 1866, with the Civil War over and Democrats again on the ascent in Sacramento, the legislature abolished the Board of Swampland Commissioners and absolved the state of responsibility for reclamation. Authority was delegated down to County Boards of Supervisors, who were now charged with establishing “reclamation districts” upon petition from owners of one-half or more of the acreage in a tract. The districts no longer needed to conform to natural drainage basins but could follow property lines, leading to districts that might be as small as the land held by a single owner. Initially, the country surveyor was responsible for reviewing and approving the plan of reclamation, but in 1868, that requirement was also removed. Thereafter, the trustees of each reclamation district had sole authority for constructing the levee system. However, the existing districts, including Swampland District No. 2, remained in effect, and Boards of Supervisors had power to approve or deny any proposal to subdivide an existing district. This system of local control, with individual landowners or reclamation districts constructing levee systems, remained in place for a half century until it was replaced by a renewed focus on centralized planning by state and federal agencies following the federal Flood Control Act of 1917.²⁰

Odell Levees

Landowners at the south end of District No. 2 began efforts to organize smaller reclamation districts and individual projects by the late 1860s, including Odell, who petitioned to construct a cross levee through his land, independent of the District No. 2 levees, in 1869. This east-west running levee would have connected to the highland on his property to form a partial barrier to flood waters flowing south through the Sacramento Basin, forcing them east into Snodgrass Slough. Joseph Wise and other landowners south of Odell's ranch supported the measure, but those to the north opposed it as the levee would slow flood waters receding from their lands. After extended debate before the Board of Supervisors, Odell withdrew his petition when success looked unlikely.²¹

Three years later, in 1872, Odell again petitioned to have 500 acres of his land—being what later became Locke Ranch—organized into an independent reclamation district. This time, Wise led the opposition to the proposal and the Board of Supervisors again denied the request. Wise had changed his position because he hoped to consolidate the Snodgrass Slough landowners into a reclamation district that would allow for common defense.²²

It is likely that Odell constructed the internal levees on his property around this time in the early to mid-1870s. These would include the features identified in this form as the House Knoll Levee (**Feature A**) and the Slough Levee (**Feature B**). Both levees served to control minor flooding in the vicinity of the house knoll, but neither was large enough to control major floods or reclaim large areas of land. No mapping, newspaper coverage, or other primary sources from the time document the creation of the levees. However, their small size suggests hand-labor construction at an early date. It is possible that Jasper Dodson began work on one or both levees as early as the mid-1850s as part of an effort to protect the ranch from winter overflow, but

¹⁸ “City Intelligence,” *Sacramento Daily Union*, August 12, 1863, 2; “Our Rich People,” *Sacramento Bee*, July 7, 1876, 3.

¹⁹ Winfield J. Davis, *An Illustrated History of Sacramento County* (Chicago: Lewis Publishing Company, 1890), 506.

²⁰ Kelley, *Battling the Inland Sea*, 55–62; Thompson, “The Settlement Geography of the Sacramento-San Joaquin Delta,” 198–200.

²¹ “Swamp Lands,” *Sacramento Bee*, July 10, 1869, 3; “Swamp Lands,” *Sacramento Bee*, August 4, 1869, 3.

²² “Board of Swamp Land Commissioners,” *Sacramento Daily Union*, October 10, 1872, 3; “Swamp Land Commissioners,” *Sacramento Daily Union*, December 5, 1872.

no evidence has been discovered that would clearly support such work. In any case, Odell would likely have repaired, improved, and expanded any existing levees to fit his more ambitious reclamation plans. Levees of this era were constructed from whatever soil was available at hand, generally by excavating a ditch immediately in front of or behind the levee. Through much of the Delta, this meant using light-weight peat soils that quickly eroded and cracked when dry, but the Delta Meadows area benefitted from the heavier aeolian soils that formed more lasting levees.²³

Runyon District (RD 551)

While Odell was unsuccessfully petitioning to organize an independent district on his land, a large-scale reclamation project was underway to the immediate north of his ranch. George D. Roberts of the Tide Land Reclamation Company began using large, floating, clam-shell dredgers in 1871 to build levees around what was then known as the Runyon District and is today the Pearson District (sometimes Pierson) (see **Figure 1** above for location of Pearson District). The machinery not only permitted building larger levees, but also allowed for soil to be collected from the river channels, rather than surrounding surfaces. This heavier soil that mixed clay, sand, and gravel was better suited for levee construction and suffered less cracking and erosion. A back levee along Snodgrass Slough turned near the north end of the Odell ranch to run west and connect to the high lands and the Sacramento River beyond, following the general route proposed by Odell in 1869 for his cross levee. In creating the cross levee, the dredgers excavated a channel, nearly 200-feet wide, that is today recognized as Meadow Slough. This was the first of a series of artificial waterways that would be created during levee construction within the modern Property boundaries.²⁴

The Runyon district received official recognition in September 1872 as Reclamation District No. 149. Wise hoped to extend the district south to the mouth of Snodgrass Slough, while Odell preferred to remain independent so as not to be subject to the tax assessments of the larger district. Ultimately, Wise prevailed and District 149 expanded south, at least informally, to include the Odell and Wise properties. This southern tip of the district, however, always remained semi-independent from Robert's main effort. When the district reorganized in 1893 as RD 551, the southern properties were excluded.²⁵

Initial Reclamation, 1875–1877

In the fall of 1875, the southern landowners, including Wise and Odell, commenced building a common levee system around the exterior of their properties. Each individual managed construction on their own land but all agreed to a common design. Along Snodgrass Slough, they cut a ditch eight-feet wide by three-feet deep and mounded the soil on the outside of the ditch to form a levee three-feet high with a bottom width of eight feet and a one-foot-wide crown. The following year they expanded the levee, adding an additional foot of height to four feet and expanding the width to 16 feet at base and eight feet at the crown. Three flood gates along Snodgrass Slough allowed water within the levees to drain to the slough at low tide.²⁶

Historical sources are vague on the location of these levees. On the east side of the properties, along Snodgrass Slough, Odell's SLS 877 ran in a straight north-south line, ignoring the meander of the slough. This may have been done to simplify (and thus cheapen) the survey of the S&O lands, or they may have deliberately planned a straight levee that would be both stronger and easier to build than one following the slough banks. While Odell came to own the thin sliver of land between SLS 877 and Snodgrass Slough (surveyed as SLS 1021), there is no evidence that he or any later owner attempted to build levees around that land. Today, several straight lines of trees growing on slightly elevated mounds are visible on the island at the center of Delta Meadows (see **Photograph 6** and **Feature C** on **Sketch Map**). These lines closely match the east boundary of SLS 877 and northeast boundary of SLS 764 and 877, and likely mark the location of the mid-1870s levees.

²³ U.S. Army Corp of Engineers (USACE), Sacramento District, Levee Evaluation for the American River Common Features Project in Sacramento, Sutter, and Yolo Counties, October 2021, 44.

²⁴ "Board of Swamp Land Commissioners," *Sacramento Daily Union*, January 4, 1872, 3; "Swamp Land Commissioners," *Sacramento Daily Union*, September 6, 1872, 3; USACE, Levee Evaluation for the American River Common Features Project, 44–46.

²⁵ "Swamp Lands," *Sacramento Bee*, July 10, 1869, 3; "Swamp Land Commissioners," *Sacramento Daily Union*, September 6, 1872, 3; Harmon S. Bonte, "Financial and General Data Pertaining to Irrigation, Reclamation and Other Public Districts in California," Division of Water Resources, Bulletin No. 37 (Sacramento: State Printer, 1930), 154–155.

²⁶ Tucker, Field Notes, Book 95, 1878, 6–7.

The levees were completed in 1877 and the reclaimed marsh land was plowed and seeded. However, that winter's floods proved the levees to be inadequate for permanent reclamation. East-west running cross levees were particularly vulnerable during flood events as the prevailing north and south storm winds would lash waves against the earth works. The cross levee north of the Odell ranch cross levee failed in two places, opening gaps 30-feet and 50-feet long. Flood water also overtopped the Snodgrass Slough Levee but did not breach it. Wise, Odell, and other landowners succeeded in closing the gaps and the floodwaters drained off quickly enough for them to seed a partial crop in 1878.²⁷

George Locke and RD 369

For Odell, however, the setback compounded his existing problems in meeting debt and tax payments. In April 1878, he sold the unreclaimed SLS 1021 and the southeast corner of SLS 877, which was behind levees but remained covered by tules. He sold the main 580-acre portion of his ranch, including the ranch house, later in 1878. Several speculative real estate transfers followed until the Sacramento merchant firm of Locke & Lavenson acquired the full Odell property in 1880. (A third partner, Louis Winter, traded his partial interest in the property to Locke & Lavenson in 1884 in exchange for properties elsewhere).²⁸

George W. Locke was born 1830 in New Hampshire and moved to Sacramento in 1854, where he established himself in the carpet trade. His partner, Samuel Lavenson, was a successful financier. As a general merchandizing firm, Locke and Lavenson became one of the most lucrative in the state capitol and the partners were able to invest in diverse business interests and real estate holdings. Locke was the dominant partner in managing the ranch affairs and eventually became the sole owner of the property. His son, George Locke Jr., inherited the ranch in 1909 following the senior Locke's death.²⁹

In May 1880, Locke and Lavenson petitioned to organize a reclamation district for their ranch composed of SLS 877, 764, and 1021. The Board of Supervisors granted the petition and RD 369 was organized on September 21, 1880. The district contained 554 acres bound by the Sacramento River to the west, Snodgrass Slough to the east, the Pearson District to the north, and the land of Joseph Wise to the south. The organization was informally known as the Locke & Lavenson District or Locke District. Today it is commonly identified as the Libby McNeil District, named for a Libby, McNeill, & Libby cannery that opened in 1916 at the northwest corner of the Locke ranch (outside the state Property boundaries), and which assumed principal maintenance responsibility for the levees. Little public information is available on the development of RD 369 because the district operated privately as it contained only the Locke & Lavenson property. It maintained no funds with the county treasurer and called no tax assessments. The district would have repaired and maintained the existing levees and may have expanded the rear levee along Snodgrass Slough to raise it above flood levels like those in 1878.³⁰

RD 554

In June 1893, Wise headed the organization of RD 554 to construct and maintain levees on the lands south of the Locke & Lavenson ranch. The district included all the lands between the Sacramento River and Snodgrass Slough, from Wise's property in the north to Tyler Slough in the south. (Tyler Slough has since been infilled, but followed the course of what is today the Old Walnut Grove-Thornton Road). The district contained 684 acres, of which Wise owned 340 acres, or slightly less than half. He joined with four other small landowners, who collectively represented 57-percent of the district lands, to petition for

²⁷ Tucker, Field Notes, Book 95, 1878, 7–8.

²⁸ "Real Estate Transfers" *Sacramento Weekly Bee*, April 20, 1878, 3; "Real Estate Transfers" *Sacramento Weekly Bee*, December 14, 1878, 5; "Real Estate Transfers" *Sacramento Weekly Bee*, November 1, 1879, 7; "Real Estate Transfers" *Sacramento Bee*, February 1, 1884, 4.

²⁹ "Death Calls Geo. W. Locke," *Sacramento Star*, August 21, 1909, 2; "68 Years of Successful Business in Sacramento," *Sacramento Union*, May 26, 1922, 9; "Pacific Mutual Life Insurance Company," *Los Angeles Star*, January 29, 1870, 2; "Our Rich People," *Sacramento Bee*, July 7, 1876, 3.

³⁰ "Petition," *Sacramento Bee*, June 12, 1880, 4; Louis Winter et als to Petition to Form Reclamation District No. 369, July 19, 1880, in Reclamation of Swamp Lands, No. 1, 166–174, Sacramento County Clerk Recorder Records, Center for Sacramento History; Bonte, "Irrigation, Reclamation and Other Public Districts," 149.

organization of the district. The Board of Supervisors approved the petition, and the district was established on August 25, 1893. It is commonly known as the Walnut Grove District, as it includes that town.³¹

At some point in the mid-1890s, RD 554 constructed a large levee along the north edge of the Wise property (**Feature D**). The work created a dredger-cut channel running west from Snodgrass Slough along the Locke-Wise property line and mounded the 15-foot-high levee on the south bank of the cut. At its west end, the cut turned north and ran about 400 feet into the Locke Ranch, connecting with the existing levee that tied into the house knoll. This north turn provided protection for Locke again flood waters that backed up against the RD 554 cross levee. The levee followed standard design conventions, having a trapezoidal shape with a broad crown and slopes of roughly 2:1 (two feet of horizontal change for every foot of vertical change) on the landside and 3:1 on the water side. These conventions, which entered broad use in the 1870s, remain standard today.³²

Reclamation Failures

Winter and spring floods remained a regular problem throughout the Delta Meadows area despite the organization of the reclamation districts and construction of new levees. In 1894, the entire Sacramento Basin flooded and “a sea of water” was reported behind Walnut Grove, where the back levee had been breached.³³ Major flooding reoccurred in 1902, though the Walnut Grove levees held through that storm. In the disastrous flood of March 1907, the Sacramento River reached its highest level yet witnessed. Both the Locke and Walnut Grove districts flooded, and the residents of Walnut Grove were reported to be bordering on panic. Countless levees throughout the Delta were lost to the flood.³⁴

At some point during these decades of flooding, the back levee of the Locke District was destroyed and not rebuilt. USGS topographic maps surveyed between 1906 and 1908 show no trace of the east levee for SLS 877 (**Figure 4**). The cartographers still depicted partial, remnant levee segments along the north end of the Delta Meadows islands, on what was the north boundary of SLS 764 and 877 and further north along the tip of the island. However, all the land east of the mounds and their connecting north and south levees appeared to have been abandoned to flooding and a midsized lake was depicted immediately east of the house knoll. Nonetheless, the land was not depicted as being covered in swamps, as was true of the entire tract east of Snodgrass Slough. This suggests that Locke ranch had been fully cleared in the late nineteenth century by burning the tules, plowing the land, and planting crops or seeding pasture grasses. At the time of mapping, the land had not been abandoned long enough for wetland vegetation to become reestablished. It seems likely that the east levee was damaged by the 1890s floods and then suffered a final blow in the 1907 event that left it in a condition beyond repair. Conversely, the Wise property to the south remained fully protected by levees and planted to grain crops.³⁵

³¹ “Petition,” *The Weekly Bee*, June 21, 1893, 5; Petition of Sperry Dye at al for The Formation of a Reclamation District, in Reclamation of Swamp Lands, No. 1, 324–328, Sacramento County Clerk Recorder Records, Center for Sacramento History; Bonte, “Irrigation, Reclamation and Other Public Districts,” 155–156.

³² USGS, *Vorden*, Quadrangle Map, 1:24,000, surveyed in 1906, 1916 edition; USACE, Levee Evaluation for the American River Common Features Project, 45.

³³ “Down the River,” *Sacramento Union*, March 1, 1894, 4.

³⁴ “Many Bad Breaks in Island Levees,” *Sacramento Bee*, March 3, 1902, 8; “Fighting for Life and Land on the Lower Sacramento,” *Sacramento Star*, March 25, 1907, 1; “Towns in Danger,” *Los Angeles Times*, March 25, 1907, 1.

³⁵ The Delta Meadows area is found at the intersection of four USGS quadrangle maps: *Vorden*, 1:31,680, surveyed 1906, 1916 edition; *Bruceville*, 1:31,680, surveyed 1907–1908, 1910 edition; *New Hope*, 1:31,680, surveyed 1907–1908, 1910 edition; and *Iselton*, 1:31,680, surveyed 1906 and 1908, 1910 edition.

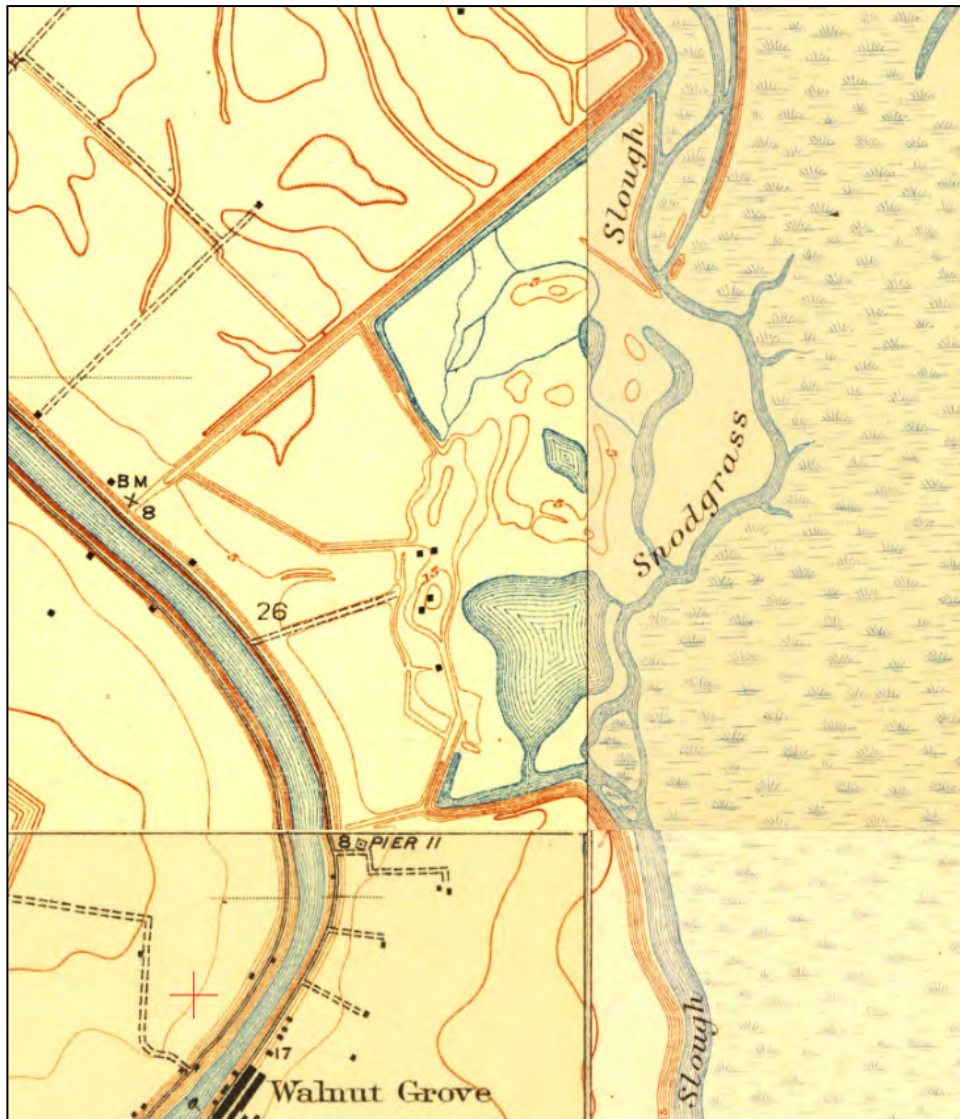


Figure 4: Topographic mapping from 1906–1908 shows the east half of the Locke ranch without effective levees but not yet reclaimed by wetland vegetation.³⁶

Railroad Embankment, Locke Levee, and RD 551 Levee Berm

The decision not to rebuild the SLS 764/877 levee after the 1907 flood might have been influenced by the contemporaneous construction of a railroad line through the Locke property. The Southern Pacific Railroad Company constructed the Walnut Grove Branch Line beginning in 1908. The initial segment between Sacramento and Freeport was completed in the summer of 1909, and the line to Walnut Grove was finished by March 1912. The Walnut Grove line was unusual in that most of its length was elevated on levees to protect against flooding through the Delta. Using a half-dozen large dredgers, the railroad cut through the marshes along Snodgrass Slough and removed soil to build levees that ranged from 15 to 20-feet high and averaged 12-feet wide (**Feature E**).³⁷

³⁶ Clockwise from upper left: USGS, *Vorden*, *Bruceville*, *New Hope*, and *Iselton* quadrangle maps, all 1:31,680, surveyed 1906–1908, 1910 edition for all except 1915 edition for *Vorden*.

³⁷ Mary L. Maniery, PAR Environmental Services, “Walnut Grove Branch Railroad, National Register Nomination, Sacramento County, California, Final Report,” prepared for US Army Corps of Engineers, August 19, 1992.

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The railroad levee protected the portion of the Locke ranch around the house knoll. George Locke Jr. augmented this protection by constructing a new levee between the railroad grade and the west end of the RD 551 levee (**Feature F**). The feature came to be identified as the “Locke Levee” or “fountain levee,” though the reasons for the latter name are not known. Approximately 3,000-feet long and 20-feet high, the levee kept flood waters out of some 30 acres of pasture north and east of the ranch house. A patch of highlands on the north side of the levee also remained above water through much of the year and could offer late summer foraging. Locke allowed the lands east of the railroad grade to revert to wetlands, as well as those lands west of the railroad and north of the Locke Levee (**Figure 5**). The State Reclamation Board (founded in 1911) acknowledged the changed situation by ceasing to assess Locke reclamation fees for the land east of the railroad.³⁸



Figure 5: A 1914 map shows the new railroad line and levee cutting through the Delta Meadows area from northeast to southwest. The Locke Levee, circled in red, was also of new construction. Note that wetlands vegetation was represented as growing through the abandoned portions of the Locke Ranch.³⁹

The Pearson District (RD 551) also engaged in a program of levee improvement following the 1907 flood. Much of that work involved expanding and strengthening the back levee along Snodgrass Slough and cross levee between the Pearson District and Locke Ranch. In 1917, the district raised the cross levee to a height of 31 feet and added a berm, approximately 100 feet wide, between the outer toe of the levee and the dredger cut (**Feature G**). District personnel planted the berm with willows to protect against wave wash. Over the decades, recreational boaters tying up in the Meadows Slough have informally developed the berm with small docks, horseshoe pits, bocce ball courts, and fruit tree and grapevine plantings.⁴⁰

Reclamation Policy, post-1917

The 1907 floods prompted the state and federal governments to assume a larger role in flood control. In 1910, Thomas Jackson, a captain in the U.S. Army Corps of Engineers, produced what came to be known as the “Jackson Report,” offering a comprehensive plan for flood control in the Sacramento and San Joaquin Valleys. The following year, the California Legislature adopted the report as official policy and created the State Reclamation Board to oversee its implementation. Congress followed suit with the Flood Control Act of 1917 that provided federal funding and coordination through the U.S.

³⁸ “Notice of Sale of Property for Delinquent Freeport Levee Assessment Number Five,” *Sacramento Bee*, October 8, 1917, 12; George C. Nickerson, “Plan of Reclamation for Lands in Reclamation District No. 551, Sacramento County, California,” 1917, 18.

³⁹ California Debris Commission, *Mokelumne River Below Galt-New Hope Bridge and Sloughs Interconnecting Sacramento, San Joaquin and Mokelumne River*, Sheet No. 2, 1:4,800, 1914.

⁴⁰ Nickerson, “Plan of Reclamation,” 14–14c.

Corps of Engineers. While the report's full recommendations took several decades to realize and portions of the plan were modified over time, the system of the levees and bypasses proposed by Jackson in 1910 for the Sacramento Basin is essentially the system that exists today as the Sacramento River Flood Control Plan (SRFCP).⁴¹

Within the Delta Meadows area, SRFCP standards apply only to the levees along the Sacramento River, none of which are within state Property boundaries. All the levees within the Property are identified as "non-project levees," meaning that they are not part of the SRFCP and are locally constructed, operated, and maintained, without federal oversight. RD 369 (Libby McNeil) has responsibility for the levees within the former Locke Ranch, including the Locke Levee and the railroad embankment along Railroad Slough. RD554 (Walnut Grove) is responsible for the railroad embankment between the slough and the Delta Cross Channel, as well as the levee that wraps around the fields south of the railroad cut. RD 551 (Pearson District) is responsible for the north cross levee and its berm. The state Central Valley Flood Protection Board provides oversight and guidance for these non-federal levees.⁴²

NRHP, CRHP, and CHL Evaluation

The Delta Meadows Levee Complex is eligible for listing in the NRHP and CRHR for its importance within the context of early reclamation efforts within the Sacramento-San Joaquin Delta. The concentration of seven levees of varied designs and purposes within the boundaries of the small state Property offers unique perspective on an important era of locally controlled flood control projects. The levees retain adequate integrity to convey their significance. While the levee complex as a whole merits listing, none of the individual levees, considered separately from the larger collection of features, meets criteria for independent listing in the NRHP and/or CRHR. The levee complex does not meet criteria for listing as a California Historical Landmark.

The Delta Meadows Levee Complex meets eligibility criteria under NRHP Criterion A and CRHR Criterion 1 as an important example of early, small-scale reclamation efforts within the Sacramento-San Joaquin Delta. Constructed between the 1870s and 1917, the levees represent a significant chapter in the history of California flood control when individual landowners and local reclamation districts held authority for planning and construction. This era spanned from the 1866 abolition of the Board of Swampland Commissioners—California's first experiment in state-wide reclamation management—through to the beginning of federal funding and oversight initiated by the Flood Control Act of 1917. Within the small confines of Delta Meadows, a rare and perhaps unique collection of seven levees from this era illustrates nearly four decades of continual effort by local landowners to control annual flooding. The diversity and concentration of these features offers insight into the evolving strategies and challenges faced by reclamationists through the late-nineteenth and early-twentieth century.

The levee complex is important both for its successes and its failures. Persistent effort despite initial setbacks allowed landowners to eventually reclaim Locke Ranch and the Joseph Wise property, transforming marshes into productive orchards, croplands, and pasture that supported generations of agriculturalists and farm laborers. Conversely, the failure of the SLS 764/877 Levee led to the reemergence of wetlands on the formerly reclaimed eastern portion of the Locke Ranch, testifying to the dynamic relationship between reclamation and ecological change. What was once perceived as a failure of reclamation is now understood as a success story for habitat preservation and restoration. Nearly 97 percent of the original tidal wetlands through the Sacramento-San Joaquin Delta have been lost to reclamation, so the reestablishment of second-generation wetlands in places like Delta Meadows take on greater value and importance. While the Property's habitat is popularly presented as having survived untouched by time, a fuller understanding of the history of the levees tells a more complicated story of changing landscapes and values in which both nature and human actors have agency.

While the levee complex as a whole has significance under these criteria, none of the individual levees rise to a level of historical significance in its own right. Considered separately, the individual levees each sought to reclaim a small piece of land and were typical of their time. None of the levees was involved in a particularly early, large, or important example of reclamation, and none represent a project that made a historically significant contribution to the reclamation of the area. The

⁴¹ Kelley, *Battling the Inland Sea*, 228-234, 278-293.

⁴² USACE, National Levee Database, accessed February 2024 at <https://levees.sec.usace.army.mil/>.

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significance of the overall levee complex arises from the concentration of diverse levees within a small area that presents a comprehensive illustration of reclamation over time and during a pivotal era. Without the larger context provided by the grouping of levees, no individual levee meets eligibility criteria.

The period of significance for the Delta Meadows Levee Complex under NRHP Criterion A and CRHR Criterion 1 runs from the beginning of construction in the early 1870s until the completion of the final levee berm in 1917. (Note that the Railroad Embankment was previously determined eligible for NRHP/CRHR listing as part of the Walnut Grove Branch of the Southern Pacific Railroad with a period of significance of 1908–1934.) The contributing components of the complex include the levees, berms, and dredger cuts created in constructing the levees. The property boundary extends from the inner toe of each levee to the outer edge of its associated dredger cut, or from inner to outer levee toe where no dredger cut is present. Features that have been added to the levees since the period of significance including gates, fences, signs, pipelines, footbridges, and recreational amenities do not contribute to the resource. The character defining features of the levee complex include the location and dimensions of the levees and dredger cuts, the earth material used in construction, and their surface appearance.

The Delta Meadows Levee Complex lacks demonstrable association with the principal achievements of any individual important to history and thus does not meet NRHP Criterion B or CRHR Criterion 2. Various individuals were responsible for the construction of the different levees within the state Property. Harris Odell oversaw the construction of Features A–C: House Knoll Levee, Slough Levee, and SLS 764/877 Levee. Odell was an early settler in the Sacramento Delta, and he ranked among the largest landowners in Sacramento County for a time. However, Odell was not a pioneer of levee construction or swampland reclamation. By the time he settled in the Delta in 1857, other landowners had already constructed a continual line of levees along the Sacramento River and built smaller flood control features within their properties to protect against the annual overflow of the river. Large-scale reclamation using heavy dredgers began in the Runyon (Pearson) District in 1871, prior to Odell completing the smaller levees on his property. Thus, Odell followed existing trends of reclamation in the Delta, rather than innovating new practices. He was notable for assembling a particularly large ranch, of which the current state park Property is a small portion, but this was primarily an accomplishment in financing and real estate speculation rather than reclamation, and the surviving levees are not associated with that achievement.

Joseph Wise headed the organization of RD 554 and was responsible for constructing Feature D, being the portion of the district's levee within the state Property. Wise was an early settler along the lower Sacramento River who succeeded in making the Delta his permanent home. However, his contributions to reclamation and agricultural development were not distinctly important, nor greater than those of other settlers of the area. At 684 acres, RD 554 was a small entity that protected only a handful of farms within its levees, and while it offered the landowners greater security by improving upon the existing levee, it was not responsible for the initial reclamation of the area. Thus, the district was a common, modest example of the type of organizations formed following the redrafting of state reclamation laws in 1868, and Wise was typical of the small farmers who created and managed such districts. Therefore, Wise does not rise to a level of historic importance for his role in organizing the district or overseeing the construction of the levee.

George Locke Jr. was responsible for constructing Feature F: Locke Levee. He completed the levee around 1912 to tie in with the newly constructed railroad embankment that ran through Locke Ranch. Locke was the son of George W. Locke, Sr., a successful Sacramento merchant and earlier owner of Locke Ranch. The son's principal contribution to history was authorizing Chinese settlers to establish the town of Locke in 1915 after a fire in neighboring Walnut Grove. Because the Locke Levee predates the town, it is not associated with the historically important founding of the town of Locke and thus cannot represent this aspect of Locke Jr.'s life. As a minor feature of the larger ranch, the levee also lacks meaningful association with Locke's career as a ranch manager.

Features E and G, the Railroad Embankment and RD 551 Levee Berm, were both completed by large corporate entities and no one individual played a singularly important role in their planning and construction. Therefore, neither of these features has direct association with any individual important to history. Likewise, there is no individual associated with the overall complex of levees, so the resource as a whole lacks significance under these criteria.

The Delta Meadows Levee Complex does not meet NRHP Criterion C or CRHR Criterion 3 as is the complex is not an important example of its type, period, or method of construction; nor is it a work of high artistic value or one designed by a

master engineer. The individual levees were all of a common, basic design, using mounded earth in a trapezoidal shape to form barriers against flooding, a long-established type and method of construction. The early levees, Features A through C, were likely constructed with hand labor, using the soil available on site. The larger, later levees and embankments, Features D-G, were constructed by steam-powered, clam-shell dredgers and also used onsite material, but this was denser, alluvial, riverbed material. These practices and levee types were ubiquitous through the Sacramento-San Joaquin Delta, and there is no suggestion that the levees with Delta Meadows meaningfully deviated from established patterns or made important contributions to those patterns. None of the levees within the Property appear to date to the earliest era of Delta levee construction in the 1850s, nor did any of them involve exceptional scale or engineering complexity or new technologies. Instead, the levee complex as a whole is an accretion of individual components, constructed at different times to meet different needs, rather than a purpose-built, integrated method of flood control. Thus, the overall collection of levees lacks cohesiveness as an engineered system and it does not represent a particular type, period, or method of construction for integrated flood control. Therefore, the levees, considered both individually and collectively, lack significance under these criteria.

The Delta Meadows Levee Complex and individual levees are not eligible under NRHP Criterion D or CRHR Criterion 4 as they have not yielded and are not likely to yield data important to the understanding of history. The construction techniques and materials used in constructing the levees and embankments were common in their time and are well documented in written sources.

The Delta Meadows Levee Complex does not meet the criteria for designation as a California Historical Landmark as none of the individual levees or the system as a whole are the first, last, only, or most significant of their type in California or regionally. The levees are also not associated with an individual or group demonstrated to have a profound influence on California history, nor are they an outstanding example of a period or style of engineering practice.

Integrity

All the levees have suffered some degree of alteration from their original construction as the result of wear-and-tear, erosion, weathering, and/or ongoing maintenance. Features A through C have been abandoned and are heavily overgrown in places. Erosion, grazing, and animal burrowing have altered the levee crown widths and slope angles. Vegetation obscures the levees in places making it difficult to determine their dimensions. All of this results in some loss of integrity of design and workmanship. However, the location of the levees remains evident, as does their relationship to natural drainage features and the other components of the levee system. This allows for understanding the intent and role of the levees. Their small dimensions and relatively primitive construction methods can also still be meaningfully compared to the later levees, giving a sense of their place within the evolution of the overall system.

The later levees, Features D through G, remain in use and experience regular maintenance and upkeep. All except for Feature G, the RD 511 Levee Berm, are topped by dirt and gravel roads that experience light vehicle and regular pedestrian use. The various agencies responsible for the levees have added gates to control access. Thus, while the levees retain their original design dimensions, they also have some modern additions and repairs. These alterations are minor in comparison to the overall scale of the levees and do little to detract from their historic appearance.

The levee system as a whole retains strong integrity of location, feeling, and association. While the design dimensions and original workmanship of the abandoned levees have been somewhat obscured, their role within Delta Meadows is still readily evident. And while the levee setting has continued to evolve as wetlands have reemerged on the abandoned portion of Locke Ranch, the Property still vividly conveys the meeting of marshes and cultivated lands, separated only by narrow strips of mounded earth. Thus, the levee system retains adequate integrity to convey its importance to turn-of-the-century reclamation efforts.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update

Photographs:



Photograph 2: Feature A, House Knoll Levee, seen on the Locke Ranch, just beyond the west Property boundary; facing northwest, February 8, 2024.



Photograph 3: The low mounds of Feature B, Slough Levee, are visible on both banks of a former slough; facing northwest, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 4: A collapsed, modern footbridge previously spanned the slough near the west Property boundary; facing southwest, February 8, 2024.



Photograph 5: The south end of the SLS 877 levee shows as an elevated mound heavily overgrown with brambles and topped with oaks and willows; facing north, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 6: Straight lines of trees growing on elevated mounds mark the locations of the SLS 877 levee (left) and SLS 764 levee (right); Google Earth imagery, May 12, 2023, annotated by JRP.



Photograph 7: West end of Feature D, RD 554 Levee, showing junction with Railroad Embankment; facing west, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 8: East end of recorded segment of RD 554 Levee with the gate in mid-distance marking the Property boundary; facing east, February 8, 2024.



Photograph 9: Five-rail gate at east end of recorded segment shown in open position; facing north, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 10: Feature E, Railroad Embankment, approximately 1,000 feet north of south Property boundary; facing south, February 8, 2024.



Photograph 11: North segment of Railroad Embankment, approximately 750 feet south of Twin Cities Road, showing uneven and irregular surface; facing south, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 12: The southeast segment of Feature F, Locke Levee, with private Locke Ranch to south (right) and seasonal pasture and wetlands to north (left); facing southeast, February 8, 2024.



Photograph 13: The northwest segment of Locke Levee showing thick vegetation and narrow foot trail; facing northwest, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 14: Recent pipeline addition laid across crown of Locke Levee; facing southeast, February 8, 2024.



Photograph 15: Pipelines extending from pump in drainage ditch on southwest side of levee. The pumping station is outside of state Property boundaries. The older rust-colored pipeline passes through levee beneath crown. The newer line crossing diagonally through photograph has been emplaced to bypass the older line; facing west, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 16: Feature G, RD 551 Levee Berm, showing wide surface area with Meadows Slough to the south (left); facing southeast, February 8, 2024.



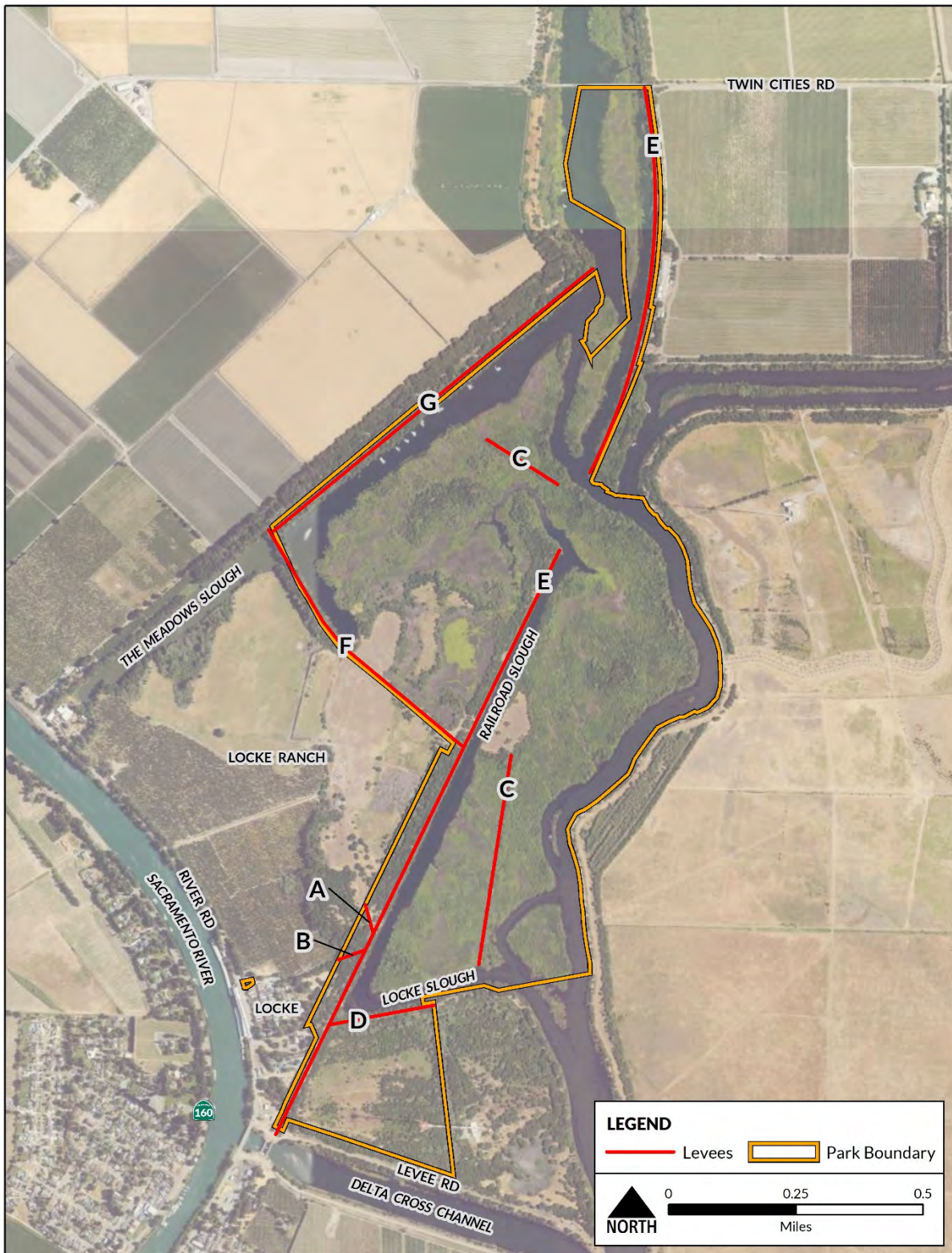
Photograph 17: Added informal dock and recreational features along the outer toe of the berm; facing southwest, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Delta Meadows Levee Complex

*Drawn by: Rebecca Flores, JRP

*Date of map: 2018 aerial; marked up by JRP, 2024



data: JRP (2024); Far Western (2024); Sacramento County GIS (2024).

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION
PRIMARY RECORD

Primary # P-34-005795

HRI # _____

Trinomial _____

NRHP Status Code 6Z

Other Listings _____

Review Code _____

Reviewer _____

Date _____

Page 1 of 16

*Resource Name or # (Assigned by recorder) Locke Ranch Remnant Resources

P1. Other Identifier: _____

*P2. Location: ☐ Not for Publication ☒ Unrestricted

*a. County Sacramento

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

*b. USGS 7.5' Quad Courtland Date 2022 T 5 North; R 4 East; _____ ¼ of Sec 35 and 36; Mount Diablo Meridian

c. Address: _____ City: Locke zip: 95690

d. UTM: (give more than one for large and/or linear resources) Zone 10S; 631016 mE / 4235496 mN

e. Other Locational Data: (e.g., parcel #, directions to resource, elevation, etc., as appropriate) Assessor Parcel Numbers (APN): 146-0110-012 and 146-0110-032

*P3a. Description: (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)

This form records and evaluates historic-era structure and object remnants on portions of Locke Ranch included within Delta Meadows State Parks Property (Delta Meadows; Property) (**Sketch Map**). The remnants were recorded in two strips of land along the western margin of the Property. The southern of the two strips encompasses the former right-of-way for the Southern Pacific Railroad Walnut Grove Branch Line where it abuts Locke Ranch. The northern strip runs along a levee that coincides with the boundary between the Property and private ranch. The main portion of the ranch, including all the residential and agricultural buildings and productive orchards, is located outside of the Property boundary to the south and west, and those resources are not recorded or evaluated in this form. This form evaluates drainage ditch, drainage pipe, and fencing sections (**Photograph 1**) (see Continuation Sheet). Levees that historically served to protect the ranch are also located within the surveyed area; however, these were recorded and evaluated as part of the Delta Meadows Levee Complex DPR 523.

*P3b. Resource Attributes: (List attributes and codes) HP32: Rural open space

*P4. Resources Present: ☐ Building ☒ Structure ☒ Object ☒ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing (Photo required for buildings, structures, and objects.)



P5b. Description of Photo: (View, date, accession #)

Photograph 1: Drainage ditch along southwest edge of recorded portion of Locke Ranch; facing southwest, February 8, 2024.

*P6. Date Constructed / Age and Sources:

☒ Historic ☐ Prehistoric ☐ Both

Circa 1912 (Maniery, "Walnut Grove Branch Railroad, National Register Nomination," August 19, 1992).

*P7. Owner and Address:

State of California

Department of Parks and Recreation

1416 9th Street

Sacramento CA 95814

*P8. Recorded by: (Name, affiliation, address)

David Hickman and Andrew Young

JRP Historical Consulting, LLC

2850 Spafford Street

Davis, CA 95618

*P9. Date Recorded: February 8, 2024

*P10. Survey Type: (Describe) Intensive

*P11. Report Citation: Scher, Naomi and David Hickman (2024) Cultural Resources Inventory for Delta Meadows State Property, Sacramento County, CA.

*Attachments: ☐ None ☐ Location Map ☒ Sketch Map ☒ Continuation Sheet ☒ Building, Structure, and Object Record ☐ Archaeological Record

☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record ☐ Artifact Record ☐ Photograph Record ☐ Other (list)

DPR 523A (1/95)

*Required Information

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*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) Locke Ranch Remnant Resources

B1. Historic Name: Locke Ranch; Southern Pacific Railroad Right-of-Way

B2. Common Name: Delta Meadows

B3. Original Use: Grazing / Railroad right-of-way B4. Present Use: Fallow / Passive recreation

*B5. Architectural Style: n/a

*B6. Construction History: (Construction date, alteration, and date of alterations). Fencing, drainage pipe, and drainage ditch installed circa 1912; fencing along railroad right-of-way and drainage pipe abandoned circa 1978; wood fence posts replaced with metal T-posts at various times.

*B7. Moved? ☒ No ☐ Yes ☐ Unknown Date: n/a Original Location: n/a

*B8. Related Features: n/a

B9. Architect: n/a b. Builder: unknown

*B10. Significance: Theme n/a Area n/a

Period of Significance n/a Property Type n/a Applicable Criteria n/a

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

The Locke Ranch Remnant Resources evaluated on this form do not meet the criteria necessary for listing in the National Register of Historic Places (NRHP) or the California Register of Historical Resources (CRHR) because they lack historical significance. The remnants are likewise ineligible for designation as California Historical Landmarks. Therefore, the Locke Ranch Remnant Resources are not historic properties under Section 106 of the National Historic Preservation Act, nor are they historical resources for the purposes of the California Environmental Quality Act (CEQA). The site has been evaluated in accordance with Section 15064.5(a)(2)-(3) of the CEQA Guidelines, using the criteria outlined in Section 5024.1 of the California Public Resources Code (see Continuation Sheet).

B11. Additional Resource Attributes: _____

*B12. References: Mary L. Maniery, PAR Environmental Services, "Walnut Grove Branch Railroad, National Register Nomination, Sacramento County, California, Final Report," prepared for US Army Corps of Engineers, August 19, 1992; Southern Pacific Company, Valuation Department, "Right of Way and Track Map, Walnut Grove Branch – Sacramento to Walnut Grove," no date, updated through 1975; and see footnotes.

B13. Remarks:

*B14. Evaluator: David Hickman

*Date of Evaluation: April 2024

(This space reserved for official comments.)

(Sketch Map with north arrow required.)

See Continuation Sheet.

P3a. Description (continued):

The drainage ditch is located toward the south end of the recorded southeast strip of land, east of the town of Locke and west of the embankment that formerly carried the Southern Pacific Railroad Walnut Grove Branch Line (**Photographs 1 and 2**). The bottom width of the ditch varies between one-and-a-half and three feet, with a depth of approximately three feet. The ditch alignment is mostly straight, with a southwest-northeast orientation, through the north end of the ditch includes several irregular curves. At its north end, the ditch drains into a cut-off segment of natural slough that is separated from Snodgrass Slough to the east by the railroad embankment. Grasses and small shrubs grow along the full length of the ditch. A small, wood footbridge spans the ditch toward its south end, along a trail that runs from the Locke community garden to the railroad embankment.

The drainage pipe is an 18-inch-diameter riveted-steel pipe that is buried below ground but exposed in two locations (**Photographs 3 and 4**). The top of the pipe has rusted through in one location. The east-west course of the pipe is visible as a low mound within the Property boundaries (**Photograph 5**). The pipe appears to originate on the private Locke Ranch, west of the Property, and it terminates on the east side of the railroad embankment, draining into Railroad Cut Slough. The east end of the pipe is embedded in a concrete headwall and terminates with a metal flap gate to prevent backflow into the system (**Photograph 6**).

Discontinuous and dilapidated fencing of various types and ages runs along the boundary between the state Property and the private Locke Ranch in the southeast strip of land and on both sides of the levee through the northeast strip of land. The fencing mixes wood and modern metal T-posts (**Photograph 7**). Where the fencing remains in use, as in the interior south and west sides of the levee, metal posts predominate and fewer wood posts survive (**Photograph 8**). Wood posts remain common where the fencing has been abandoned and no longer functions as a barrier (**Photographs 9 and 10**). The posts in the southwest strip carried up to four strands of barbwire, most of which have fallen away. Along the levee, the fencing includes wire mesh at its bottom to control small animals and a strand of barbwire at top. This has fallen away on the north side of the levee, where the fence has been abandoned, but remains in place on the functioning fence south of the levee.

Most of the southeast strip of land consists of a 170-foot-wide band of land abutting the railroad embankment that the Southern Pacific Railroad Company previously owned in association with the branch line. The railroad allowed this land to become overgrown and it today features thick vegetation and marshy ground (**Photograph 11**). The northeast strip features pasture south of the levee and a mixture of pasture and wetlands north of the levee (**Photograph 12**).

B10. Significance (continued):

The remnant structures and objects recorded on this form are located along the western margins of Delta Meadows where a former Southern Pacific Railroad right-of-way abutted Locke Ranch and along a cross levee that protected the ranch from flooding. The construction of the Southern Pacific Walnut Grove Branch Line between 1908 to 1912 led to the installation of fencing, drainage pipe, and a drainage ditch. The below historic context presents a brief overview of the development of Locke Ranch, the completion of the railroad, and the particular events leading to the construction of the recorded remnants. A more detailed history of the reclamation of this area is presented in a separate form that inventories and evaluates the Delta Meadows Levee Complex.

Historic Context

Locke Ranch, located on the east bank of the Sacramento River north of Walnut Grove, was created from land first settled by Jasper Dodson in the 1850s. Dodson constructed a two-story brick house on a knoll one-third of a mile back from the riverbank. He kept cattle on the property's higher lands and used the marshlands to the north and the east for summer forage (**Figure 1**). His tenure on the land was short-lived and in 1862 he became unable to meet the terms of his mortgage and lost the property at a sheriff's sale.¹

¹ William Lewis, General Land Office (GLO), *Township No. V North, Range No. IV East, Mt Diablo Meridian*, June 18, 1859; "Sheriff's Sale," *Sacramento Bee*, December 13, 1862, 4.

Harris Ward Odell, originally of New York, acquired the Dodson property and assembled a larger ranch around it by buying up neighboring properties and filling swampland claims for the marshes to the rear of the Dodson land. In 1875, Odell joined with neighboring landowners to construct a common levee system along Snodgrass Slough, allowing for the reclamation of the marshlands. When the land had dried, the landowners burned off the tules and seeded the former marshes with pasture grasses and grain crops. On the higher lands near the Sacramento River, he established pear orchards. Odell then ranked among the largest landowners in Sacramento County, but he had taken on large debts to fund his buying spree and faced heavy tax assessments on the improved land. The winter storms of 1877–1878 led to widespread flooding in the Sacramento Valley, and the new levees proved inadequate to hold back high waters in Snodgrass Slough. The flooding proved too much for Odell's overstretched finances, and in the spring of 1878, he began selling off the ranch in pieces. Several speculative real estate transfers followed until the Sacramento merchant firm of Locke & Lavenson acquired the core of the Odell property in 1880 (Figure 2).²

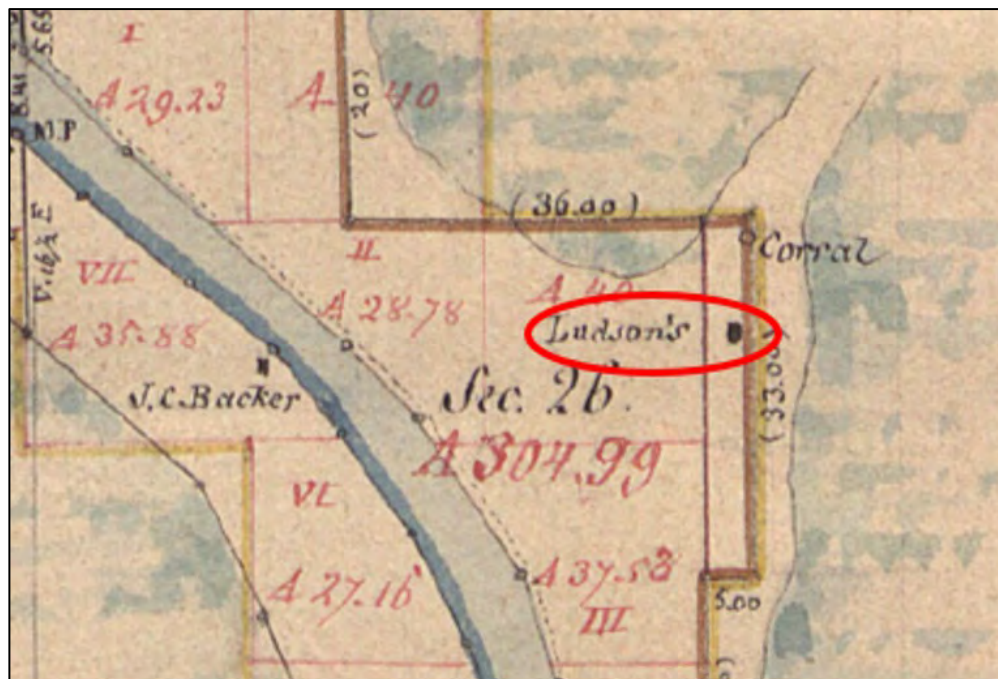


Figure 1: An excerpt from the 1859 GLO township survey shows the residence and corral of Jasper Dodson (misidentified as “Ludson”) on the highlands in Section 26, on what later became the Locke Ranch.³

² “City Intelligence,” *Sacramento Daily Union*, August 12, 1863, 2; “Our Rich People,” *Sacramento Bee*, July 7, 1876, 3; E. E. Tucker, *Field Notes*, Book 92, 1878, 6–8, State Engineering Department Records (William Hammond Hall Collection), California State Archives, Sacramento.

³ William Lewis, GLO, *Township No. V North, Range No. IV East, Mt Diablo Meridian*, June 18, 1859.

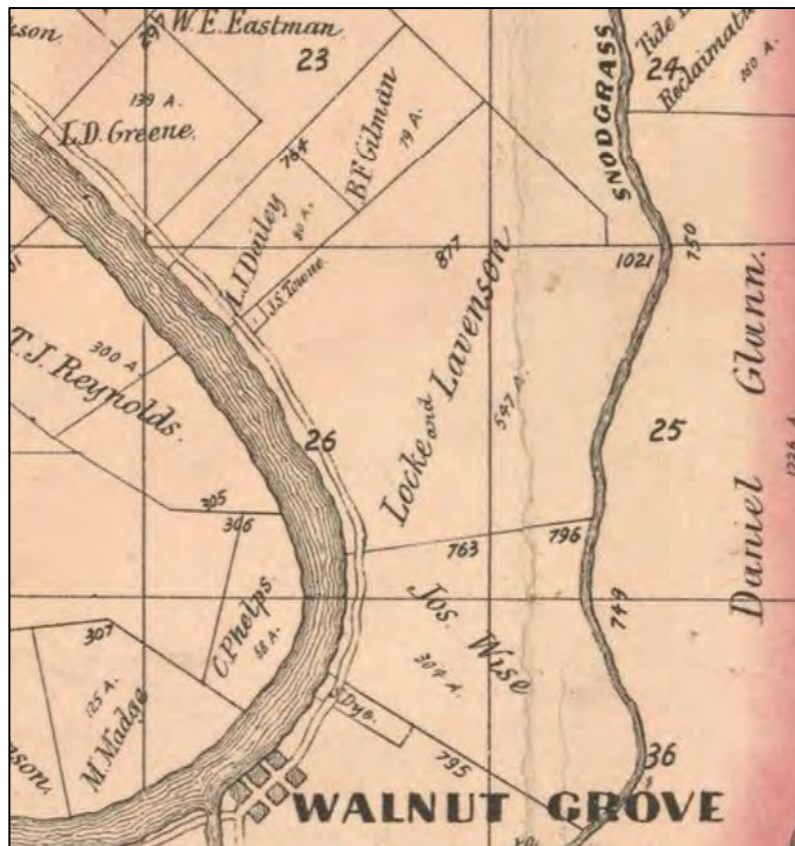


Figure 2: The 1885 Official Map of Sacramento County showed the 547-acre Locke & Lavenson property between the Sacramento River and Snodgrass Slough.⁴

George W. Locke was born 1830 in New Hampshire and moved to Sacramento in 1854, where he established himself in the carpet trade. His partner, Samuel Lavenson, was a successful financier. As a general merchandizing firm, Locke & Lavenson became one of the most lucrative in the state capitol and the partners were able to invest in diverse business interests and real estate holdings. Locke was the dominant partner in managing the ranch affairs and eventually became the sole owner of the property. His son, George Locke Jr., inherited the ranch in 1909 following the senior Locke's death.⁵

Locke & Lavenson leased their ranch property to experienced farmers, rather than operating it directly. In 1880, Quong Lee, a 35-year-old Chinese immigrant, leased 100 acres and headed a crew of six Chinese farmers, raising asparagus and onions and tending to the pear orchards. Later, the ranch was among the first in Sacramento County to raise sugar beets, employing Japanese contractors to cultivate and harvest the crop. At its peak, the ranch included its own packing house, workers dormitories, and a shipping wharf, all of which were located outside of the state Property boundaries.⁶

Locke continued the reclamation that Odell had begun. In 1880, he organized a reclamation district (No. 369) to complete larger levees around the property and make more of the land available for crops and pasture. Still, Locke struggled against the winter and spring floods that regularly proved too great for the levees to manage. The Walnut Grove district flooded in 1894,

⁴ Fred A. Shepherd, *Official Map of Sacramento County, California*, April 8, 1885.

⁵ "Death Calls Geo. W. Locke," *Sacramento Star*, August 21, 1909, 2; "68 Years of Successful Business in Sacramento," *Sacramento Union*, May 26, 1922, 9; "Pacific Mutual Life Insurance Company," *Los Angeles Star*, January 29, 1870, 2; "Our Rich People," *Sacramento Bee*, July 7, 1876, 3.

⁶ "Rich Returns from a Beat Sugar Patch," *Sacramento Bee*, March 21, 1899, 4.

1902, and 1907. At some point during that time, the back levee of the Locke district, along Snodgrass Slough, failed and was not repaired.⁷

The decision not to rebuild the back levee might have been influenced by the contemporaneous construction of a railroad line through the Locke property. The Southern Pacific Railroad Company constructed the Walnut Grove Branch Line between 1908 and 1912. The line sliced diagonally through Locke Ranch on an embankment elevated 10 to 15 feet above the surrounding terrain. The embankment functioned as a levee, keeping Snodgrass Slough floodwaters out of the western portion of the ranch. The portion of the ranch east of the embankment was abandoned and eventually revegetated with wetland species. This area now forms the core of the Delta Meadow wetlands. Locke also constructed a new levee, identified as the “Locke Levee” or “fountain levee,” to connect the railroad embankment to an existing cross levee on the north side of the ranch. This levee protected 30-acres of orchards and pasture located north and east of the farmhouse.⁸

The construction of the railroad and associated Locke Levee created the structures and objects documented in this form. The two strips of land surveyed run along the boundary of the ranch and the railroad right-of-way on the southeast and along the Locke Levee in the northeast. The fencing in both locations was first installed at the time of the embankment and levee construction to mark property boundaries and control the movement of livestock. The drainage pipe and ditch were also emplaced at the same time to allow the lands west of the railroad to drain off excess water that would otherwise pool against the embankment. A railroad right-of-way map shows fencing on both sides of the right-of-way and two pipes passing through the embankment (**Figure 3**). The fence east of the railroad, along the slough, has since been removed and the second pipe depicted on the map was not relocated during survey.⁹

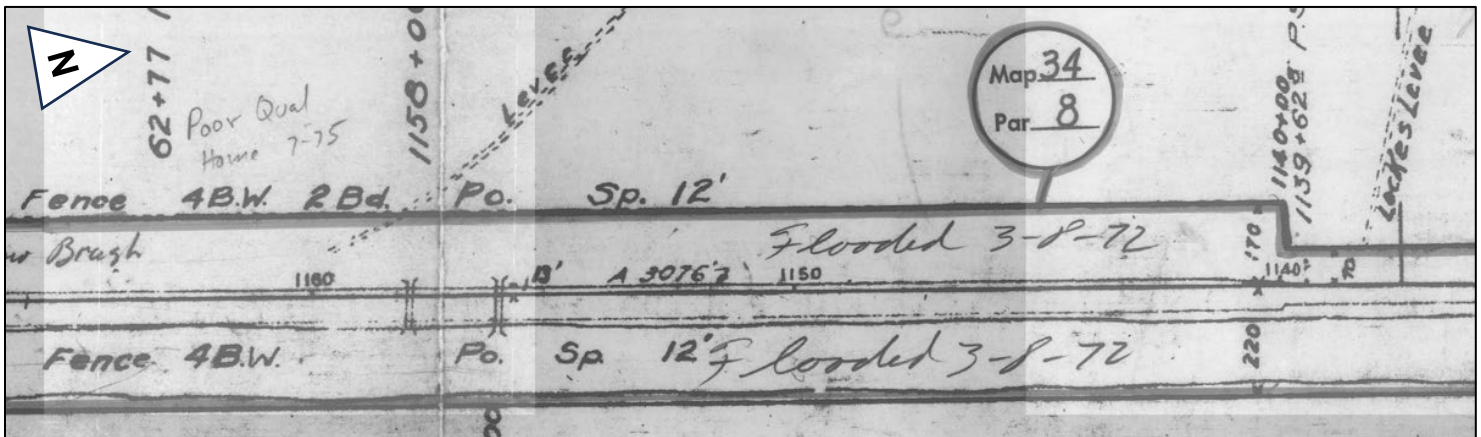


Figure 3: An excerpt of a railroad right-of-way map shows the embankment through Locke Ranch with fences depicted along the property boundary with the ranch (four strands barbwire, two boards, pole spacing 12 feet) and along the east edge of the embankment by the slough (four strands barbwire with no boards). Two pipes are shown passing through the embankment and “Locke’s Levee” is shown at the right (north) edge of the excerpt. Railroad inspectors also annotated the map regarding conditions, such as the adjacent flooding in March 1972.¹⁰

⁷ “Petition,” *Sacramento Bee*, June 12, 1880, 4; Louis Winter et als to Petition to Form Reclamation District No. 369, July 19, 1880, in *Reclamation of Swamp Lands*, No. 1, 166–174, Sacramento County Clerk Recorder Records, Center for Sacramento History; Many Bad Breaks in Island Levees,” *Sacramento Bee*, March 3, 1902, 8; “Fighting for Life and Land on the Lower Sacramento,” *Sacramento Star*, March 25, 1907, 1; “Towns in Danger,” *Los Angeles Times*, March 25, 1907, 1.

⁸ Mary L. Maniery, PAR Environmental Services, “Walnut Grove Branch Railroad, National Register Nomination, Sacramento County, California, Final Report,” prepared for US Army Corps of Engineers, August 19, 1992.

⁹ Southern Pacific Company, Valuation Department, “Right of Way and Track Map, Walnut Grove Branch – Sacramento to Walnut Grove,” no date, updated through 1975; Delta Meadows Chronology,” file folder (ff.) Delta Meadows, Chronology – 2000, California State Parks Northern Service Region Headquarters.

¹⁰ Southern Pacific Company, “Right of Way and Track Map, Walnut Grove Branch,” updated 1975.

The Southern Pacific Railroad Company abandoned the Walnut Grove Branch Line in 1978 and it is likely that the drainage pipe and the fencing along the railroad right-of-way fell out of use around that time. Aerial photographs also indicate the drainage ditch was eroding in the late 1960s and early 1970s, deepening its course, cutting across a dirt road, and developing slight meanders that deviated from its previously straight route (**Figure 4**). These changes suggest a lack of regular maintenance on the ditch. The Locke Ranch operators continue to maintain the fence along the south side of Locke's Levee, on private property, and metal T-posts have largely replaced the original wood posts along those sections. The fence on the north side of the levee, within current Delta Meadows Property boundaries, has been abandoned and many of the wood posts are extant, though in poor condition, and much of the wire and mesh fencing has fallen away.¹¹

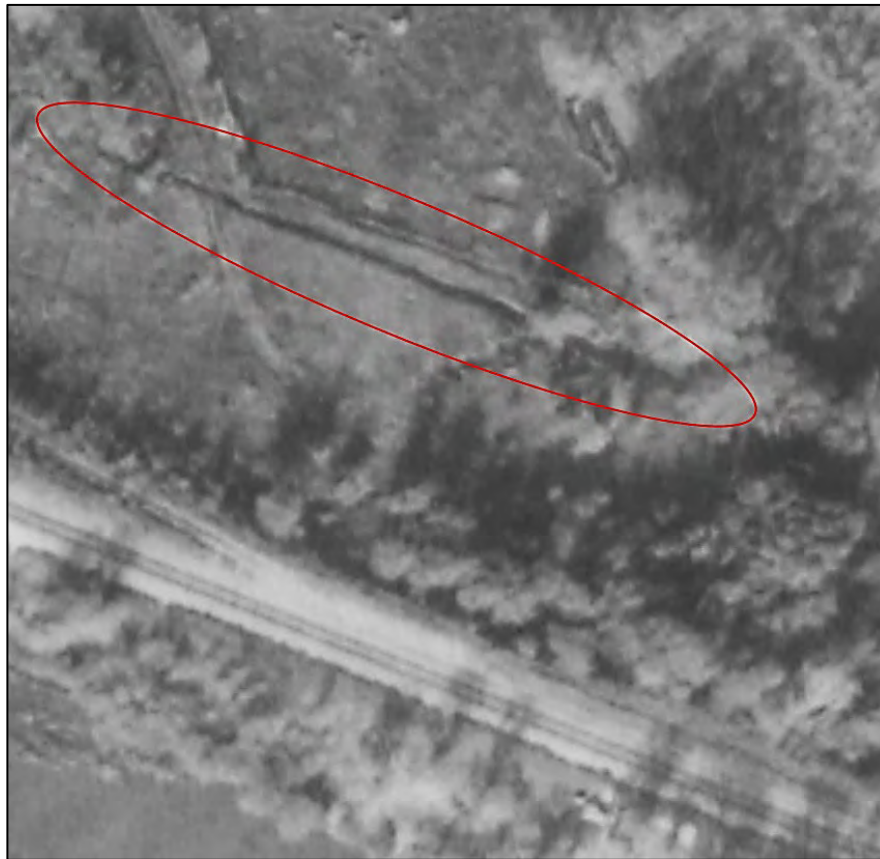


Figure 4: A 1971 aerial photograph shows evidence of uncontrolled erosion along the drainage ditch.¹²

The California Legislature authorized property acquisition for Delta Meadows in 1965. Budget shortfalls and planning uncertainties delayed any purchases until 1985 when the former railroad parcels were acquired through an act of condemnation. The California Division of Parks and Recreation purchased the field northeast of Locke Levee in the 1990s. Research did not reveal that State Parks has since made changes or performed maintenance on the fences and drainage structures.¹³

¹¹ Maniery, PAR Environmental Services, "Walnut Grove Branch Railroad, National Register Nomination," August 19, 1992.

¹² Cartwright Aerial Surveys, Flight CAS-3069, Frame 3-7, 1:12,000, March 20, 1971.

¹³ "Delta Meadows Chronology," file folder (ff.) Delta Meadows, Chronology – 2000, California State Parks Northern Service Region Headquarters; Division of Beaches and Parks, *Delta Meadows Project, Detail Acquisition Plan, Parcels 29 & 31*, Drawing No. 5093.19, Sheet 32, July 16, 1967

Evaluation

The Locke Ranch Remnant Resources, including the fencing, drainage pipe, and drainage ditch, do not meet the criteria necessary for inclusion in the NRHP and/or CRHR because they lack historical significance.

The Locke Ranch Remnant Resources are not eligible under NRHP Criterion A or CRHR Criterion 1 because they lack important associations with significant events or trends. The remnants were all constructed around 1912, at the time that the Southern Pacific Walnut Grove Branch Line was completed through Locke Ranch, and the Locke Levee was added to connect the railroad embankment to existing levees. Thus, the remnants are not associated with the settlement and early development of the ranch and instead, they are minor structures and objects that were added to accommodate the changed property lines and drainage patterns created by the construction of the railroad embankment and associated levee. The railroad branch line was independently evaluated in 1991 and determined eligible for inclusion in the NRHP for its association with the development of the region and for embodying the distinctive construction methods of its era. However, this significance extends only to the major components of the railroad, being the embankment, trestles, and surviving rails. The fences and drainage remnants evaluated here are minor and ubiquitous structures that lack direct association with the operation of the railroad and were used by the operators of Locke Ranch to control the movement of livestock and draining lands impacted by the construction of the embankment. The addition of these structures and objects did not add new capacity to the ranch or alter its patterns of agricultural production, but merely continued existing functions. The fences and drainage structures served common and unexceptional roles on the ranch, and nothing indicates that they were of any special importance in the operation of the property. The remnants were largely abandoned prior to the property being acquired by California State Parks, and they thus lack important association with the Property development.

The Locke Ranch Remnant Resources have no demonstrable association with a specific individual important to history and thus are ineligible for listing under NRHP Criterion B and CRHR Criterion 2. George W. Locke died in 1909, prior to their construction. His son, George Locke Jr., inherited the property and managed it at the time of the railroad's completion; however, the son's principal contribution to history was authorizing Chinese settlers to establish the town of Locke in 1915 after a fire in neighboring Walnut Grove. The evaluated resources have no association with the town of Locke and thus cannot represent this aspect of Locke Jr.'s life. As minor components of the larger ranch, the fences and drainage structures also lack any meaningful association with Locke's career as a ranch manager.

The Locke Ranch Remnant Resources also lack significance under NRHP Criterion C and CRHR Criterion 3 as they are not important example of their type, period, or method of construction; nor are they works of high artistic value or ones designed by a master engineer. The drainage structures are of a small scale and involved no important engineering accomplishment. The fences are of a ubiquitous type without any distinguishing characteristics and do not represent new or important technological advances. These remnant resources are all exceedingly common on ranch and agricultural lands throughout California and have no importance as representatives of a type, period, of method of construction; nor do they display any significant engineering or aesthetic ambitions.

The Locke Ranch Remnant Resources do not meet NRHP Criterion D or CRHR Criterion 4 as they have not yielded and are not likely to yield data important to the understanding of history. The construction techniques and materials used in draining and fencing the fields were common in their time and are well documented in written sources.

Finally, the Locke Ranch Remnant Resources do not meet the criteria for designation as California Historical Landmarks as none of them are the first, last, only, or most significant of their type in California or regionally. The remnants are also not associated with an individual or group demonstrated to have a profound influence on California history, nor are they an outstanding example of a period or style of agricultural or engineering practice.

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*Resource Name or # (Assigned by recorder) Locke Ranch Remnant Resources

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update

Photographs (continued):



Photograph 2: North end of drainage ditch, just south of where it empties into natural slough; facing southwest, February 8, 2024.



Photograph 3: Rusted through section of drainage pipe; facing east, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Locke Ranch Remnant Resources

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 4: Second exposed section of pipe; facing northwest, February 8, 2024.



Photograph 5: Pipe route visible as raised mound; facing east, February 8, 2024.

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*Resource Name or # (Assigned by recorder) Locke Ranch Remnant Resources

*Recorded by D. Hickman & A. Young *Date February 8, 2024

☒ Continuation ☐ Update



Photograph 6: East end of pipe, discharging into Railroad Cut Slough; facing south, February 8, 2024.



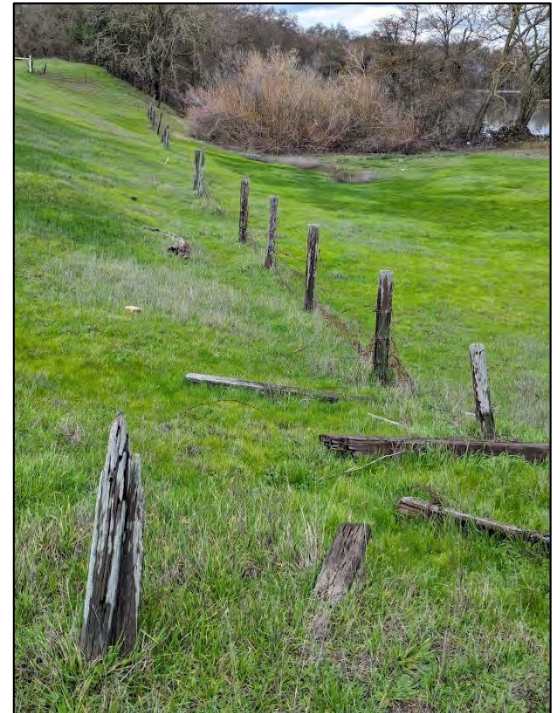
Photograph 7: Fencing section in southeast strip combining wood and metal posts; facing southwest, February 8, 2024.



Photograph 8: Modern fencing segment with metal posts supporting wire mesh topped with a single strand of barbwire; facing west, February 8, 2024.



Photographs 9 and 10: Abandoned section of fence on north side of levee with wood posts, metal mesh, and barbwire; facing north (above) and northwest (right), February 8, 2024.



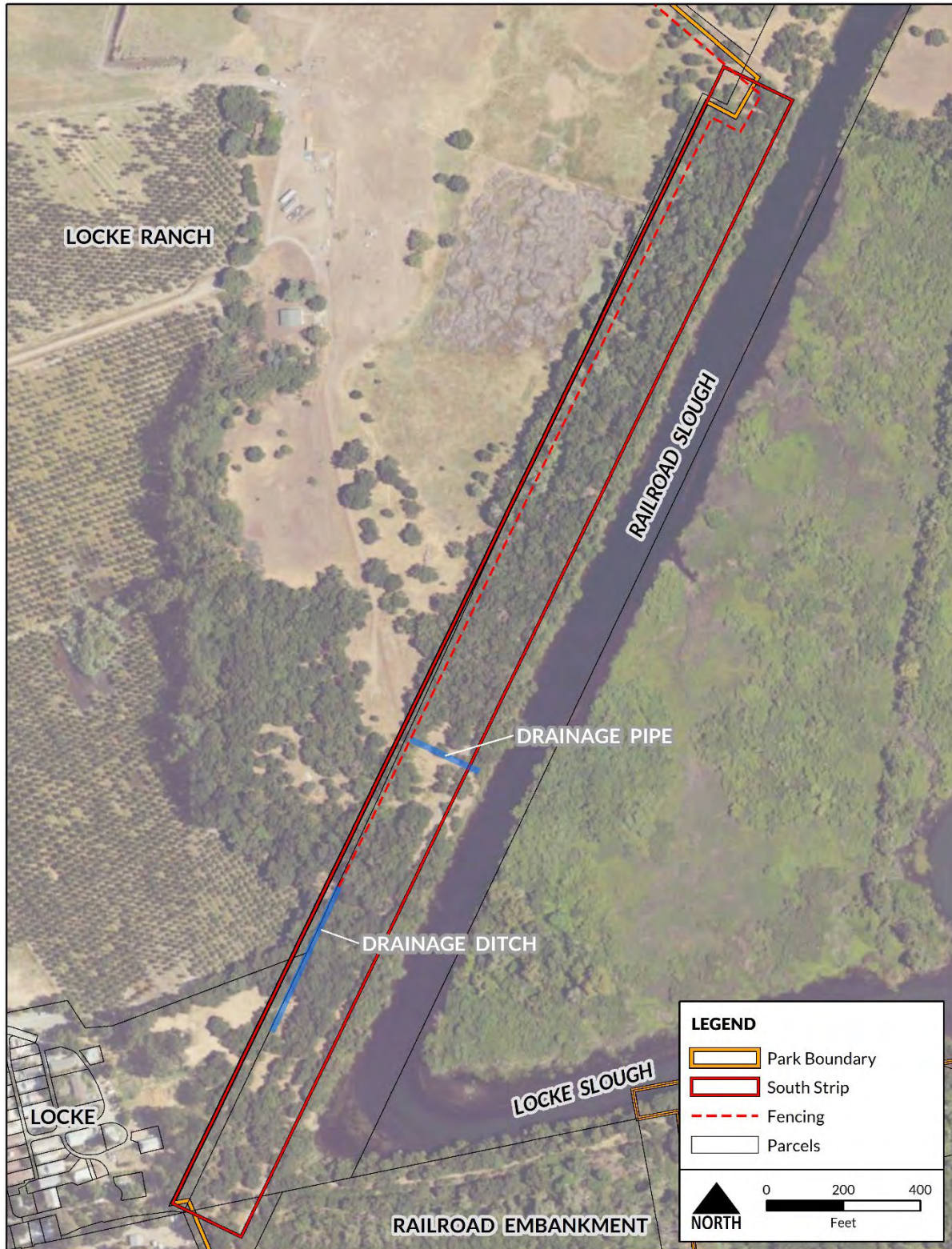


Photograph 11: Thick vegetation and marshy ground within former railroad property; facing west, February 8, 2024.



Photograph 12: Pastures south of levee and behind maintained fence; facing southwest, February 8, 2024.





data: JRP (2024); Far Western (2024); Sacramento County GIS (2024).



data: JRP (2024); Far Western (2024); Sacramento County GIS (2024).