Matilija Dam Ecosystem Restoration Project

Chronology Report

prepared by

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Acronyms

amsl	above mean sea level
ASR	Alkali Silica Reactivity
BEACON	Beach Erosion Authority for Control Operations and Nourishment
BO	Biological Opinion
BRDA	Baldwin Road Disposal Area
CalTrout	California Trout
Casitas MWD	Casitas Municipal Water District
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CSCC	California State Coastal Conservancy
CSU	California State University
DCR	Dam Removal Concept
DDR	Design Documentation Report
District	Ventura County Watershed Protection District
DOG	Design Oversight Group
DPS	Distinct Population Segment
DSOD	Division of Safety of Dams
DWR	Department of Water Resources
EIS/EIR	Environmental Impact Statement/Environmental Impact Report
ESA	Endangered Species Act
ESUs	Evolutionarily Significant Units
FEMA	Federal Emergency Management Agency
HFB	high flow bypass
HSI	Habitat Suitability Index
IRWM	Integrated Regional Water Management
MDERP	Matilija Dam Ecosystem Restoration Project
MODA	Meiners Oaks Disposal Area
NEPA	National Environmental Policy Act
NFWF	National Fish and Wildlife Foundation
NMFS	National Marine Fisheries Service

PMP	Project Management Plan
RLF	Resources Legacy Fund
SCWC	Southern California Water Company
SEIR	Subsequent Environmental Impact Report
USACE	United States Army Corps of Engineers
USBR	United States Bureau of Reclamation
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
VRMWD	Ventura River Municipal Water District
Watershed Protection	Ventura County Watershed Protection District
WCB	Wildlife Conservation Board
WRDA	Water Resources Development Act
WRRL	Water Resources Research Laboratory
WSEs	water surface elevations

Introduction

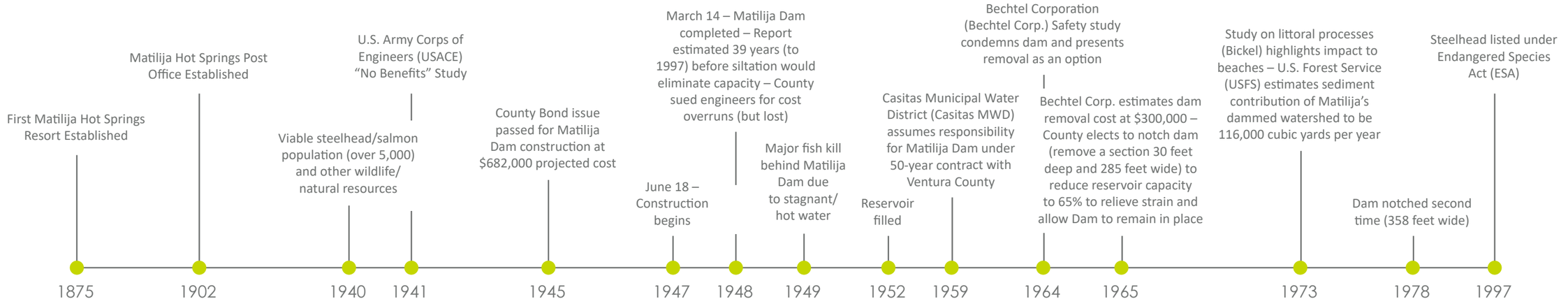
The purpose of this report is to provide a consolidated, annotated chronology of the history of Matilija Dam in the Ojai Valley and its associated downstream Ventura River infrastructure in Ventura County, California. Constructed in 1947 by the Ventura County Flood Control District (now the Ventura County Watershed Protection District [Watershed Protection])[1], the 168-foot-high arched concrete dam has become obsolete. Accumulation of coarse sediment behind the dam has led to reduced water storage capacity and exacerbates structural deficiencies. The Ventura County (County) Board of Supervisors adopted a resolution to decommission and remove Matilija Dam to address dam safety risk and re-establish access for endangered steelhead to the upper reaches of Matilija Creek.

The report is divided into two parts. The first part begins with Matilija Dam's early history starting in the late 1880s with the pre-dam Matilija Hot Springs property and continuing through the late 1990s. The second part covers the years 1997 through 2022, focusing on efforts to remove the dam and implement the Matilija Dam Ecosystem Restoration Project (MDERP). The MDERP components covered in this report include the dam, Live Oak Acres and Casitas Springs Levees, the Robles Diversion Facility, Camino Cielo Bridge, Santa Ana Boulevard Bridge, recreation improvements, and habitat restoration projects. The goal of the MDERP is to restore access to headwaters habitat for endangered steelhead populations, enhance downstream riparian and floodplain habitats, and replenish sand and cobble to the Ventura River estuary and near-shore coastal habitats.

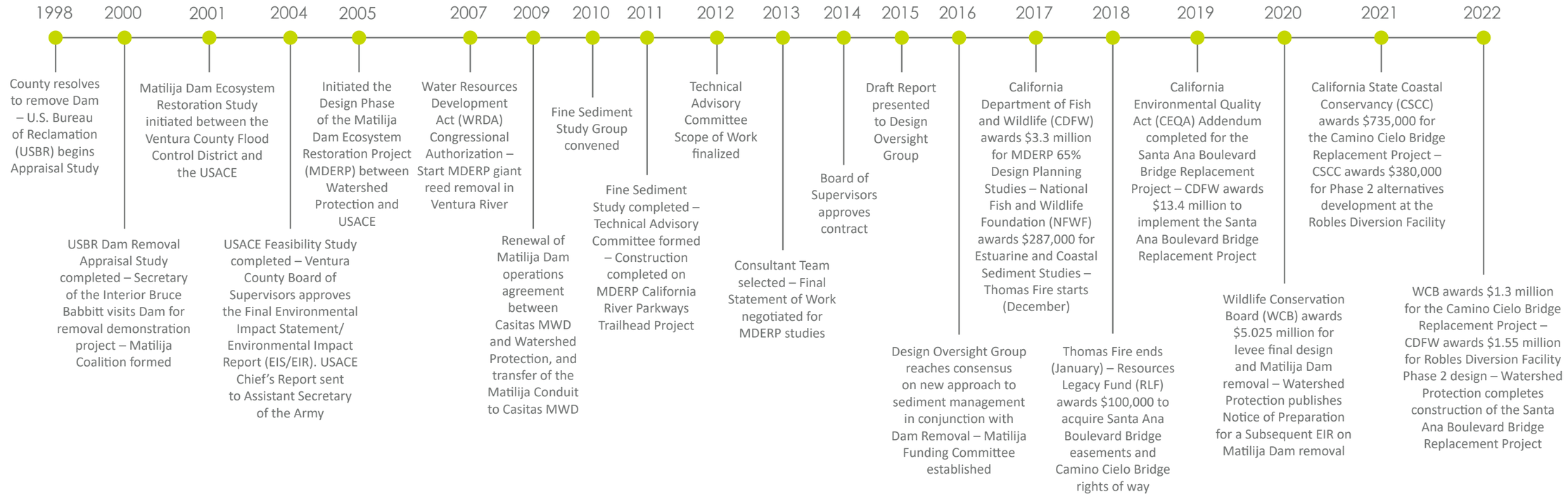
This report aims to provide an objective and accurate description of the technical main points, processes, input, and decisions by project management, advocates, and opponents regarding the construction, operation, and future of Matilija Dam and its associated downstream components. Materials used to prepare this chronology report and referenced herein include construction documents, technical reports, engineering studies, and archived newspaper articles. Most of the documents referenced herein are available for public access on the website www.matilijadam.org, ventura.org/board-of-supervisors, or vcpublicworks.org/wp. The following figure provides an overview of key milestones in the history of Matilija Dam and the MDERP.

[1] The Ventura County Flood Control District changed its name to Ventura County Watershed Protection District (Watershed Protection) on January 1, 2003, to reflect regulatory updates, changes in community values, and new funding opportunities (Ventura County Public Works 2020). All references to this agency prior to 2003 will be referred to as Ventura County Flood Control District, while all references following 2003 will be referred to as Watershed Protection.

Part 1: Historical – 1880s to 1997



Part 2: Matilija Dam Ecosystem Restoration Project (MDERP) – 1997 to Present



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Part 1: Historical – 1880s to 1997

Matilija Dam's early history essentially begins in the late 1800's when the area downstream of the current dam's location, known today as Matilija Hot Springs in the Ojai Valley, was discovered and developed as a therapeutic mineral springs resort through a series of owners. In 1947, the Ventura County Flood Control District began construction of Matilija Dam, a 168-foot-high arched concrete dam on Matilija Creek, to provide water supply and flood control within the Ventura River watershed. Construction of the dam was fraught with cost overruns and unexpected foundation issues (for which the County sued the engineers in superior court for breach of contract but lost the case). After the dam was completed in 1948, the reservoir behind Matilija Dam filled completely for the first time in 1952. In 1959, the Casitas MWD assumed responsibility for Matilija Dam under a 50-year contract with the Ventura County Flood Control District.

In 1965, a safety study by the Bechtel Corp. identified that Matilija Dam suffered from concrete deterioration and abutment motion and suggested dam removal as a possible solution. These structural concerns resulted in the decision to lower the dam crest by notching the concrete spillway (once in 1965 and a second time in 1977) as an alternative to the more expensive option of dam removal. A 1972 study confirmed that chemical expansion from an alkali-aggregate reaction in concrete flanking the spillway caused excessive cracking and made the concrete structurally ineffective. By 1973, in addition to dam safety concerns, awareness of littoral processes and Matilija Dam's impact on starving sediment from downstream beaches became an issue. A 1973 study by the USFS estimated the sediment contribution of Matilija's dammed watershed to be 116,000 cubic yards per year. Evidence was mounting against retaining the dam. The Ventura County Board of Supervisors' resolution in 1998 to remove Matilija Dam begins "Part 2" of the dam's history.

The following table provides a detailed chronology of Matilija Dam's early history, listing important milestones by date and summarizing technical reports, engineering and construction documents, studies, memoranda, and relevant newspaper articles.

Date	Milestone
Pre-1850	Indigenous peoples in the Ojai Valley area may have used the Matilija hot mineral springs before European and American settlers arrived.
1871	J.W. Wilcox visited the Ojai Valley area and soaked in the Matilija hot springs to rehabilitate from an injury he received in the Mexican American War. He is credited with "discovering" the medicinal properties of the springs.
1875	R. M. Brown purchased the Matilija hot springs property and established a resort with a bathhouse, sulfur baths, six guest cabins, and a 20-room hotel.
1877	The property was sold to a Captain Gardener who named Matilija Hot Springs.
1881	Mr. Wilcoxen purchased the springs from Captain Gardener and used the site as a private home for the convalescence of his grandson, Arnold Carver. Later, Wilcoxen opened the site to visitors.
1884	Following a severe flood, A.W. Blumberg built a new hotel, cabins, bathhouse, horse stables, and camping area. The redeveloped hot springs resort could accommodate over 100 people (not including campers.)
1887	Matilija Hot Springs becomes one of California's most famous mineral springs resorts of the late nineteenth and early twentieth centuries.
1901	The 80-acre Matilija Hot Springs resort and 320 additional acres were purchased by S.P. Creasinger, a real estate developer.
1902	A stone building was constructed at Matilija Hot Springs to house a federal post office on-site that remained in use until 1916. Also in 1902, a grand indoor, heated plunge pool was constructed at the resort with the pool water piped directly from the hot sulfur springs.
1920	Joe Linnell purchased the hot springs property, then in 1938 it was sold again to G.E. Mann.
Pre-1940	A viable steelhead/salmon population of over 5,000 individuals and other wildlife and natural resources existed in Matilija Creek.
1941	A USACE study concluded that a dam at Matilija would not provide adequate benefits to be cost effective for flood control and water supply.
	From 1941 to 1948, the Matilija Hot Springs resort was leased to Ray Robertson and his wife, who successfully managed the operation. During the time the Robertsons ran the resort, the property was sold to the Ventura County Flood Control District in 1946.
1945	A Ventura County bond issue was passed for construction of Matilija Dam. The dam was designed to provide water supply and flood protection for downstream communities. The construction cost was estimated to be $682,000.
1946	News articles published in *Ventura County Star-Free Press* announced the start of construction of Matilija Dam in June 1946 by the Keir Construction Company, with the Guy F. Atkinson Company and the Bressi and Bevanda Construction Company. The news articles also reported on public concern over construction cost increases. [A total of three news articles from 1946 are archived and available as PDFs.]
	The Matilija Hot Springs property was purchased by the County for use in relation to the construction of the Matilija Dam.
	Document completed, "Specifications for Gates, Valves and Operating Appurtenances for the Matilija Dam," prepared by Donald R. Warren Company Engineers, prepared for the Ventura County Flood Control District. This document includes the bid items and specifications for supply and delivery of gates, valves and electrical control equipment for the Matilija Dam.
	May 14 – Document completed, "Invitation to Bid and Specifications for Matilija Dam," prepared by Donald R. Warren Company Engineers, prepared for the Ventura County Flood Control District. This document includes the bid forms, specifications, and Addendum No. 1 for construction of Matilija Dam and appurtenances.
	June 18 – Construction of Matilija Dam begins.
	August – Document completed, "Specifications for Clearing of Water Storage Area at Matilija Dam," prepared by Donald R. Warren Company Engineers, prepared for the Ventura County Flood Control District. This document includes the specifications for clearing approximately 125 acres within the reservoir site by removal or burning of all trees, brush, limbs, logs, and wood debris.

Date	Milestone
1947	News articles published in *Ventura County Star-Free Press* reported on the progress of construction of Matilija Dam and the controversy surrounding a temporary halt in concrete pouring in mid-April due to discovery of a clay seam on the left abutment. The temporary work stop was ordered by Edward Hyatt, state engineer, Division of Water Resources, due to unsatisfactory foundation conditions requiring further exploration to resolve. Controversy centered on the reason for late discovery of the flaw, the existence of an earlier geologist's warning report, and cost increases to cover the geologic explorations. Donald R. Warren, Zone 1 project engineer, placed the blame for tardy discovery of Matilija Dam abutment flaws on the County supervisors, the County surveyor, and County work force; others charged Warren with negligence. Mid-year, the contractors brought a declaratory relief case in court regarding increased construction costs; however, the judge found in favor of the Ventura County Flood Control District that "the revised estimate on the dam as of June 16, 1947, does not constitute a job materially different from the one bid upon by the contractors." The Oil Workers International Union, local 120, requested a grand jury investigation of the construction of Matilija Dam and its added costs, asking for charges to be filed against any and all persons if evidence indicates there has been neglect of responsibilities, and a legal consultant, S.V. Prichard, was hired by the Ventura County Board of Supervisors to study the "Matilija problem." In October, to ensure the safety of the dam and reassure the public, the County supervisors approved funds for core drilling and dye testing to detect any water seepage under the dam. By year's end, the troublesome soft clay seam in the left abutment had been excavated and filled with concrete, and construction of Matilija Dam was nearly complete; however, the contractors were denied final payment (10 percent) on their contract. A December 1947 *Ventura County Star-Free Press* article presented several retrospective photographs of the dam during various phases of construction. News articles also reported on activity and public comment on the proposed Casitas Dam and its consulting board and controversy over its estimated safe yield. [A total of 77 news articles from 1947 are archived and available as PDFs.]
	March – Construction specifications and bid document completed, "Construction of the Matilija-Casitas Conduits," prepared by Donald R. Warren Company for the Ventura County Flood Control District. This document provides the specifications and contractor bid information for construction of the Matilija-Casitas Conduits (i.e., the Matilija Conduit, Santa Ana Valley Conduit, Ojai Valley Conduit, Eastside Conduit, and Casitas Conduit) in association with Matilija Dam.
	July 1 – Report filed with the Ventura County Board of Supervisors, "Report on Geologic Conditions at Matilija Dam as of May 25, 1947," prepared by Charles P. Berkey, Geologist, for the Ventura County Flood Control District. This report summarizes findings of a geologic investigation of the rock formation underlying the partially complete Matilija Dam to ascertain any physical stability issues.
	September 15 – Report filed with the Ventura County Board of Supervisors, "Geologic Conditions at Matilija Dam as Disclosed by Excavations for Spillway Apron," prepared by Thomas L. Bailey, Consulting Geologist, for the Ventura County Flood Control District. This report presents the results of a study of the foundation rock beneath the central portion of Matilija Dam revealed by excavations for the spillway apron. Results showed fractures and cracking in the foundation rock and the consulting geologist recommended strengthening the dam and apron as well as conducting regular inspections for signs of cracking or leakage.
	November 15 – Memorandum completed, "Probable Safe Yield of Matilija and Casitas Reservoirs," prepared by Richard H. Jamison, Hydrologic Engineer, for Ventura County Flood Control District. This study found that Matilija Reservoir would be expected to have a probable safe yield of 2,100 to 2,800 acre-feet per year and the Casitas Reservoir would be expected to have a probable safe yield of 400 to 2,600 acre-feet per year, depending on annual rainfall, evaporation, and seepage.
1948	Matilija Hot Springs property becomes a Ventura County Park. Bill Olivas leases the spa resort from the County, however another significant flood in 1969 damages many of the buildings and the swimming pool.
	News articles published in *Ventura County Star-Free Press* included reporting on the completion of Matilija Dam in March (after a coring and grouting program was conducted to test for and minimize leakage) and focused on the Matilija Dam grand jury investigations and the lawsuits filed by opposing parties in superior court. In January, the Donald R. Warren company filed in superior court a $77,561 plus-interest action against the Ventura County Flood Control District and its supervisors for non-payment of fees for final plans and specifications for Casitas Dam and the Matilija-Casitas conduits. In February, the Ventura County Board of Supervisors demanded and received Warren's resignation as engineer for Matilija and Casitas dams and the conduit system. Also in February, the Ventura County Flood Control District and its supervisors negotiated a $246,952 settlement with Atkinson Kier Bressi and Bevanda over termination of their contract.

Date	Milestone
	As the 1947 grand jury was dismissed in February, their report was filed recommending a consulting board be used in all future dam-building projects, and a 1948 grand jury was then impaneled. In April, the supervisors ordered a suit brought against the Donald R. Warren company to recover over a million dollars for Matilija Dam's excessive costs. In June, Warren denied any breach of contract and filed a cross-complaint in superior court, asking that the district pay the company $178,848.50 plus interest instead of the company's paying the district $1,236,000. The company alleged it should receive $116,787.03 for final plans and specifications for Casitas Dam and the Matilija-Casitas conduits, $51,186.91 for final fees on the construction costs of Matilija Dam, $8,353 for purchase of equipment and supplies, for special reports and services of consultants and $2,520 for use of employees by the district after the Warren company contract was terminated. In September, the 1948 grand jury filed a resolution urging court action rather than settling out of court. News headlines in October announced "County wins first round" as Superior Court judge L. N. Turentine over-ruled Warren's demurrers and will allow all charges when the trial starts on January 10, 1949. [A total of 75 news articles from 1948 are archived and available as PDFs.]
	March 14 – Dam construction complete. Matilija Dam was constructed as a variable radius concrete arch dam with an elevation of 1,025 feet above mean sea level (amsl) located near the left abutment. The reservoir formed by Matilija Dam had an original storage capacity of 7,000 acre-feet at the spillway crest.
	May 3 – Report filed with the Ventura County Board of Supervisors, "Safe Yield – Matilija Reservoir," prepared by Harold Conkling, prepared for the Ventura County Flood Control District. This study estimates the safe yield of Matilija Reservoir to be 1,800 acre-feet taking into consideration prior water rights and usable capacity. The study also describes and compares previous safe yield estimates.
	September 8 – Report filed with the Ventura County Board of Supervisors, "Feasibility of Spreading Water from Matilija Dam in Eastern Ojai Valley," prepared by Harold Conkling, prepared for the Ventura County Flood Control District. This study considers the feasibility of conveying water from Matilija Reservoir to spread in eastern Ojai Valley to benefit groundwater resource supply when appropriate conditions are met. Historical rainfall data, runoff conditions, and water table fluctuations were considered. The report recommends that design and cost estimates for water transmission conduit for spreading be included in the Engineer's report on the distribution system from Matilija Reservoir.
	Harold E. Burket, architect, warns County Supervisors of alkali-reactive aggregate. Since its construction, over the years Matilija Dam has experienced significant deterioration due to an alkali-aggregate reaction which causes a reduction of strength in concrete properties over time.
1949	A major fish kill occurs behind Matilija Dam due to stagnant/hot water.
	News articles published in the *Ventura County Star-Free Press* reported on the Ventura County Flood Control District versus the Donald R. Warren company superior court case. From January through May, news articles closely followed the trial and reported on daily court proceedings, witness testimony, and evidence produced on topics including stripping of the dam site prior to construction, construction cost estimates, site selection, arch-type dam selection, foundation geological conditions, abutment excavation, concrete pouring, percolation tests, core sampling and grouting, and safe yield calculations. During 70 days in court, Judge L. N. Turrentine heard testimony from Dr. Thomas Bailey, consulting geologist for the Ventura County Flood Control District, Dr. Charles P. Berkey, the district's engineering-geologist consultant, John Spielman, state division of dams inspector, John Kier, project manager during dam construction, Randall Cremer, advisory board engineer, Loring Tabor, Arthur Taylor, Frank Bonner, Rush Sill, and Hyde Forbes, consulting engineers, ex-supervisor Russel Cook, Dr. Vito Vanoni, Caltech hydraulics professor, Robert Ryan, district engineer, Dr. John Buwalda, Caltech geology professor, and Donald R. Warren and his employees. On June 8, 1948, Judge Turrentine handed down a decision declaring that Matilija Dam is safe and "will adequately serve its purpose" and awarded the Donald R. Warren Company, dam designers, a sum of $33,437. Judge Turrentine ruled in favor of the Warren Company on five contentions and in favor of the Ventura County Flood Control District on only one. The Ventura County Flood Control District had sought damages of $1,250,000 and the Warren Company had sought to collect $178,000. The Warren company was awarded $112,158 and the Ventura County Flood Control District was awarded $78,720, making a net to the Warren company of $33,437. On June 20, 1948, the Ventura County Board of Supervisors signed a resolution requiring the Ventura County Flood Control District to forego any plans to appeal the judgement. [A total of 119 news articles from 1949 are archived and available as PDFs.]
	April – Document completed, "Memorandum Re: Probable Effect of Silt on the Yield of Matilija Reservoir," prepared by Richard H. Jamison, prepared for the Ventura County Flood Control District. This memorandum

Date	Milestone
	was prepared to graphically illustrate the probable effect of silt deposit on the future yield of Matilija Reservoir and to estimate the cost of new water obtained from the reservoir for price setting purposes. The study revealed that beginning in 1950 a safe yield of 1,830 acre-feet annually could be expected for 31 years with deficiencies after that period.
	May 25 – Document completed, "Memorandum Re: Matilija Dam, Ventura County," prepared by F. E. Bonner, Consulting Engineer, for Ventura County Flood Control District. This memorandum presents the results of an analysis of the sufficiency of the Matilija Dam arch structure and the sufficiency of the dam for passing large flood flows with safety. Recommendations included core drilling and further geologic investigations for improvements in the spillway area.
1950	News articles published in the *Ventura County Star-Free Press* announced that Matilija Creek continued to flow into the dam at a rate of 24-acre-feet per day and had reached a record level of 1,243 acre-feet of stored water as of March 1, 1950. [Two news articles from 1950 are archived and available as PDFs.]
1951	May 8 to June 16 – Approximately 253 acre-feet of water stored in Matilija Reservoir was diverted to the Ojai Spreading Grounds which was completed in spring 1951.
1952	News articles published in the *Ventura County Star-Free Press* reported on record-breaking January rainfall that caused Matilija Reservoir to fill for the first time since construction and resulted in flooding in Live Oak Acres. In addition, County Supervisors debated policy for selling water in Matilija Reservoir, including proposed contracts, amount available for sale, and the cost at $25 per acre foot (as opposed to $60 per acre foot under consideration just 4 years prior). [Two news articles from 1952 are archived and available as PDFs.]
	January 15 – Matilija Reservoir filled and overflowed for the first time since completion of the dam and the overflow continued until June 17, 1952. The official sale of water also started this year.
1958	Construction of the Robles Diversion Dam, located approximately 2.3 miles downstream of Matilija Dam, is completed. The Robles Diversion Dam diverts Ventura River water at a normal maximum diversion rate of approximately 500 cubic feet/second into the Casitas Reservoir during the rainy season, December through February. The structural height of the dam is 24 feet, and the dam crest length is 530 feet with a crest elevation at 765 feet. A conduit system conveys Casitas Reservoir water for 36 miles to populated areas in Ventura County. Ventura River Municipal Water District (VRMWD; currently known as Casitas MWD) operates the Casitas Reservoir under a permanent contract with the USBR. The Casitas Reservoir is a part of the USBR Ventura River Development Project. In addition to Casitas Reservoir, the Ventura River Development Project includes Robles Diversion Dam, Robles-Casitas Canal, and conduit system. The storage capacity of the Casitas Reservoir is 250,000 acre-feet covering 2,700 acres and it receives inflow from both the Ventura River and Coyote Creek watersheds.
1959	January 21 – Report completed, "Summary of Operation of Matilija Reservoir," prepared by Ventura County Flood Control District, covering operational data from January 1, 1948, through December 31, 1958, including data on annual rainfall, inflow and distribution of water from the reservoir. The purpose of the report was to provide operational documentation to the VRMWD which assumed responsibility for operation and maintenance of Matilija Dam effective January 1, 1959. VRMWD took over operation of Matilija Dam from the Ventura County Flood Control District for the purpose of integrating the dam's storage and diversion capabilities with the Ventura River Development Project (Casitas Reservoir, Robles Diversion Dam, Robles-Casitas Canal, and conduit system).
1965	Matilija Hot Springs facilities leased to Bill and Marcia Olivas who reverted the property to its original use and operated it as a health and wellness spa for the next 22 years.
	March – Report completed, "Structural Analysis of Matilija Dam," prepared by the MacNeal-Schwendler Corporation for Bechtel Corp. This analysis of Matilija Dam was performed because the 17-year-old dam has noticeably suffered from concrete deterioration and abutment motion. The analysis was conducted in two phases. Phase 1 evaluated the current state of the dam with respect to foundation motion and chemical expansion of the concrete and Phase 2 used computer modeling to predict the stress distributions of critical loading conditions in the future. The safety study condemns Matilija Dam and presents removal as an option at an estimated cost of $300,000.
	Spring – In response to the safety study and to address concerns from the California Division of Safety of Dams (DSOD), a 285-foot-long by 30-foot-deep notch, with its base at an elevation level of 1,095 feet, was

Date	Milestone
	excavated in the center of the dam to remove damaged concrete, reduce the hydrostatic load and reservoir capacity to 65 percent, and improve the stability of the dam allowing it to remain in place.
	July 16 – Document completed, "Specifications for Matilija Dam Remedial Works, Ojai, California, Specification No. FC 66-4," prepared by Bechtel Corp., prepared for County of Ventura, Department of Public Works. This document provides the specifications for the removal and disposal of portions of Matilija Dam spillway, bridge, and other facilities and construction of new bridge piers and steel and timber foot bridges.
1967	News articles (with photographs) published in the *Ventura County Star-Free Press* discussed the fate of Matilija Dam as the two-year period of safety testing by the Bechtel Corp. came to an end. Four times each day since March 1965, readings were taken on eight Carlson stress gauges in the dam to detect any movement to determine the stability of the dam in its altered state from removal of a "football field-size section" from the spillway. [A total of three news articles from 1967 are archived and available as PDFs.]
	February 8 – Data collected, "Abutment Yield Measurement Data," prepared by Bechtel Corp., prepared for County of Ventura, Public Works Department. Abutment yield measuring devices were installed in both abutments of Matilija Dam to measure the yield, if any, of the abutments due to the movement of the structure because of water loads and continued concrete expansion. This data set includes measurements of recorded concrete yield and the movement from original position in inches during the period of February 1967 through July 1978. This data set formed the basis for International Engineering Company, Inc.'s 1972 analysis "Matilija Dam Stress Investigations," prepared for County of Ventura, Department of Public Works, to evaluate the stability and reliability of the structure and report the findings.
	August – Report completed, "Review of Matilija Dam 1967," prepared by Bechtel Corp., prepared for County of Ventura, Department of Public Works. This report summarizes the results of the engineering tests conducted by Bechtel Corporation on Matilija Dam in its modified notched condition and the conclusions drawn from the observations conducted over a 2-year period from 1965 through 1967. It presents Bechtel's recommendations on the adequacy and safety of Matilija Dam in its altered configuration, and recommendations for the future monitoring and observation of the dam.
1969	January – Large storms resulted in deposits of over 1,000 acre-feet (approximately 1.6 million cubic yards) of debris and sediment in the Matilija Dam reservoir. This reduced reservoir storage capacity to approximately 2,500 acre-feet.
	March 20 – Report completed, "Matilija Dam Silt Accumulation Data," prepared by Ventura County Public Works Department, Field Survey Section. This document contains elevation data and drawings of silt levels in the reservoir behind Matilija Dam from survey measurements taken on March 20, 1969.
1972	County of Ventura Cultural Heritage Board named the entire 9.22-acre Matilija Hot Springs site (its buildings and structures as well as easements to the springs) as County Cultural Landmark #25.
	A news article published on February 6, 1972, in the *Ventura County Star-Free Press*, posed the question of whether steelhead trout will ever return to the Ventura River. Charles Price, member of the Ventura County Fish and Game Commission, sees a polluted Ventura River as a valuable fishing and recreational resource that has been lost and he advocates for restoring the river and wants to see something happen soon. [One news article from 1972 is archived and available as a PDF.]
	August – Report completed, "Matilija Dam Stress Investigations," prepared by International Engineering Company, Inc., prepared for County of Ventura, Department of Public Works. This report presents the results of investigations conducted to evaluate the stress conditions of Matilija Dam under various loadings. The study found continued chemical expansion from an alkali-aggregate reaction in concrete flanking the existing spillway section which caused excessive cracking and made the concrete structurally ineffective. It found that the footbridge spanning the notch near the left abutment would be stable for a horizontal acceleration of 0.1 g (g-force) applied at Elevation 1,095 amsl. However, for an earthquake measuring 6.5 to 7 on the Richter Scale occurring on the Santa Ynez fault, the footbridge was found to be unstable. Recommendations included extensive testing of the concrete at various levels of the dam, an additional monitoring program of differential movement, and major modifications to the footbridge spanning the notch.
1973	A study on littoral processes (Bickel) highlights the dam's impact on beaches. The USFS estimates the sediment contribution of Matilija's dammed watershed to be 116,000 cubic yards per year.

Date	Milestone
1975	April – Report completed, "Matilija Dam Reservoir Operation and Modification Cost Study," prepared by Ventura County Flood Control District and Casitas MWD. In view of the continuing need for costly modifications to Matilija Dam to maintain its structural integrity, and the significant reduction in storage capacity from the as-built reservoir configuration, the future benefit of maintaining Matilija Reservoir as an active storage facility was in question. On March 12, 1974, the Ventura County Board of Supervisors authorized staff to participate in a detailed study of Matilija Dam and Reservoir to determine probable costs of necessary modifications and revised testing program, and to determine expected benefits for water stored in Matilija Reservoir and diverted to Lake Casitas. This report presents the results of that study and recommends Matilija Dam be modified in accordance with the least costly alternative described in Alternative 4.
1976	August 4 – Report completed, "Strain Gage Program – Matilija Dam, 1965 to 1975," prepared by Carlson Instruments of Campbell, California, prepared for Ventura County Flood Control District. This report documents the installation of equipment in February 1965 and the subsequent monitoring efforts for the strain gage program designed to monitor the movements of Matilija Dam. The abutment yield measurements from the eight strain gages are provided in an appendix and notes on meter calibration and replacement are provided.
1977	February – Report completed, "Matilija Dam – Report on Preliminary Studies for Modification to Outlet Works and Crest of Dam and Spillway," prepared by International Engineering Company, Inc., prepared for County of Ventura Department of Public Works. This report describes preliminary studies conducted for development and evaluation of various alternatives for proposed modifications of the outlet works and modifications to the crest of Matilija Dam and its spillway to accomplish the scope of work as contained in an Agreement dated 3rd December 1976. Cost estimates for the four outlet works alternatives are included. Preliminary cost for construction of the proposed modifications to the crest of dam and spillway was estimated to be approximately $1.3 million.
	Matilija Dam's center notch was widened to 358 feet in 1977 and now functions as the spillway for flood releases. Lowering the spillway reduced the maximum reservoir capacity by 3,200 acre-feet.
1978	A news article published on May 26, 1978, in the *Ventura County Star-Free Press*, documented the demolition of a defunct cement tower on top of the Matilija Dam spillway using explosives. [One news article with photographs from 1978 is archived and available as a PDF.]
1979	News articles published in the *Ventura County Star-Free Press* discussed the diminished storage capacity of Matilija reservoir (resulting from siltation and notching of the spillway) and included a March 29, 1979, photograph of water coursing over the spillway. [Two news articles from 1979 are archived and available as PDFs.]
	June – Report completed, "National Dam Inspection Program: Phase I Inspection Report for Matilija Dam," prepared by the State of California Department of Water Resources, Division of Safety of Dams, prepared for the Department of the Army, Corps of Engineers, Sacramento District. The two primary conclusions of the investigation are that alkali-aggregate reaction is gradually destroying the dam and that the reservoir is gradually filling with erosional depositions. The report concludes that Matilija Dam as modified is safe for the near-term future but recommends continued monitoring of the dam's behavior and continued periodic testing of the concrete. Detailed stability and hydrologic studies were performed for this Phase I study; thus, the USACE did not require further in-depth studies and a Phase II-type report.
1988	The County of Ventura sells Matilija Hot Springs to Brooks Barton, a Santa Barbara real estate professional. For sixteen years, the facility was operated as a spa and retreat center, available for weekend rental by various groups for yoga, dance, spiritual and New Age retreats, until it was sold in 2004.
1989	July 14 – Report completed, "Coastal Sand Management Plan, Santa Barbara and Ventura County Coastline," prepared by Noble Consultants, Inc., prepared for the Beach Erosion Authority for Control Operations and Nourishment (BEACON). This document presents the coastal sand management plan findings on shoreline conditions, outlines sand management strategies, provides recommendations for a short-term demonstration project, and describes a long-term plan and its implementation and monitoring requirements.

Part 2: Matilija Dam Ecosystem Restoration Project (MDERP) – 1997 to Present

A turning point in Matilija Dam's history is reached around the year 1997 when the National Marine Fisheries Service (NMFS) lists southern California steelhead (*Oncorhynchus mykiss*) as a federally endangered species. The dam is determined to be a physical barrier to the migration of endangered southern California steelhead to critical habitat in the headwaters of Matilija Creek. By this time, structural deficiencies combined with reservoir sedimentation have rendered Matilija Dam obsolete. The accumulation of approximately 8 million cubic yards of sediment in Matilija Reservoir has a negative impact on both aquatic and terrestrial habitats along the Ventura River and deprives Ventura County beaches of much needed sand and cobble.

Recognizing that Matilija Dam no longer provides the intended water storage and flood control benefits and poses an increasing safety risk, the Ventura County Board of Supervisors in 1998 adopted a resolution stating, in part, that it is "necessary and beneficial" to remove the dam. Following the Board's resolution, the Ventura County Flood Control District began work with a coalition of federal, state, and local agencies, environmental organizations, and the public to determine how to remove Matilija Dam with the primary goals of ecosystem restoration, including reconnecting steelhead trout to its historic spawning habitat upstream of the dam, and allowing sand and other sediment to be transported to Ventura County coastal beaches. Soon thereafter, the first of many studies related to dam removal was underway.

In April 2000, the USBR completed an Appraisal Study which concluded that removal of Matilija Dam was technically feasible and would require an average duration of 2 to 25 years to accomplish in the field, for a total project cost of between $21.6 million and $179.4 million depending on the chosen final removal alternative. In 2001, the MDERP Study was officially initiated between the Ventura County Flood Control District and the USACE. The two agencies began work on preparing a MDERP Feasibility Report and an EIS/EIR in compliance with CEQA and the National Environmental Policy Act (NEPA).

Further studies revealed that, both as part of dam removal and independent of it, downstream infrastructure would require upgrades to address current and future flood protection and water supply needs. For example, if Matilija Dam were to be left in place, projections showed that its reservoir would completely fill with sediment by 2030, creating additional pressure on downstream infrastructure. Thus, under any scenario, existing downstream levees and bridges as well as the Robles Diversion Facility would require modification to accommodate increased sediment transport from the Matilija Creek headwaters to the Ventura River estuary.

By 2004, the various stakeholders reached consensus on preferred MDERP points. The MDERP elements for the estimated $124 million project included: dam removal and coarse sediment stabilization upstream of the dam, Camino Cielo bridge modification, Meiners Oaks Levee protection, Robles Diversion high flow bypass, slurry of 2 million cubic yards of fine sediment to disposal sites near Baldwin Road, Live Oak Acres Levee protection, Santa Ana Boulevard bridge modification, Casitas Springs Levee protection, Foster Park wells installation, and Robles Diversion desilting basin construction. The MDERP also included invasive giant reed (*Arundo donax*) removal from within the main stem of Ventura River up to the headwaters of Matilija Canyon, creating

recreation features between Baldwin Road to the dam reservoir area, and acquiring real estate to implement the MDERP.

Between 2010 and 2016, to address design issues, a Fine Sediment Study Group was convened, a Technical Advisory Committee was formed, and a Design Oversight Group studied approaches to sediment management in conjunction with dam removal. Funding MDERP became a critical issue, and in 2017, a Matilija Funding Sub-Committee (consisting of representatives from Watershed Protection, agency representatives, non-governmental organizations, and Patagonia) developed the Matilija Dam Removal and Ecosystem Restoration Project Funding Plan. A 2017 grant from the CDFW awarded $3.3 million to support MDERP 65% Design Planning Studies and a 2019 CDFW grant awarded $13.4 million to implement the Santa Ana Boulevard Bridge Replacement Project. Other recent funding awards from the CSCC, the WCB, and other entities contributed to advancing final design plans and updating required environmental documentation for MDERP components.

Implementation of the MDERP will allow Watershed Protection to address potential liabilities while restoring the community and ecosystem benefits and resilience of the watershed. Removal of the dam will not only restore access to important headwaters habitat for endangered steelhead populations, but it will also enhance downstream riparian and floodplain habitats through improved natural sediment transport and replenish the Ventura River estuary and near-shore coastal habitats with long-sequestered sands and cobbles. Recognizing that the MDERP downstream infrastructure improvements must be completed prior to dam removal, Watershed Protection continues to aggressively seek funding to advance design plans and implement project construction. Notably, in October 2022, the Santa Ana Boulevard Bridge Replacement Project, one of the requisite downstream infrastructure improvements, was successfully completed.

The following table provides a detailed chronology of the MDERP to date, listing important milestones by date and summarizing technical reports, engineering and construction documents, studies, funding awards, and relevant newspaper articles.

Date	Milestone
1997	August 18 – NMFS lists southern California steelhead as a federally endangered species.
1998	A news article published on November 4, 1998, in the *Los Angeles Times*, reported on the growing support for removal of Matilija Dam, from members of the Board of Supervisors to non-profit organizations, noting that funding obstacles would need to be overcome. [One news article from 1998 is archived and available as a PDF.]
	January – Report completed, "1997 Supplement to Matilija Dam 1996 Concrete Evaluation," prepared by BTC Laboratories, Inc., for Ventura County Flood Control District. This report provides data for evaluating the concrete in the upper portion of Matilija Dam, specifically at elevation 1,068 amsl. The report found that lower strength concrete in this area of the dam can be attributed to Alkali Silica Reactivity (ASR). ASR is more prevalent toward the downstream face of the dam and the strength values decrease from upstream to downstream at elevation 1,068 amsl.
	July 6 – Letter from Ed Henke presented to the Ventura County Board of Supervisors, "Subject: Seismic Safety Modernization Project Plan for Casitas Dam, Ventura, California... Redesign the Project to Provide for Legally Required Mitigation for Major Losses of 'In-Stream Values.'" This letter requests that the seismic upgrade of Casitas Dam include consideration of the dam's deleterious effects on aquatic resources, especially southern California steelhead, and provides several recommendations.
	July 8 – Document completed, "A Case for Removal of Matilija Dam," prepared by Ed Henke. The author of this document advocates for complete removal of Matilija Dam. The document provides historical references, photographs, opinion, and personal recommendations for removing Matilija Dam to restore aquatic resources.
	November 3 – Ed Henke presented to the Ventura County Board of Supervisors, "A Case for Removal of Matilija Dam." Without motion the Board hears the presentation of Mr. Henke and requests that this matter be reviewed and studied by BEACON and that the Public Works Agency come back to the Board at later date with recommendations.
1999	Based on the Board of Supervisor's direction, the Ventura County Flood Control District began work with a coalition of federal, state, and local agencies, environmental organizations, and the public to determine how to remove Matilija Dam with the primary goals of ecosystem restoration, including reconnecting steelhead trout to its historic spawning habitat upstream of the dam, and allowing sand and other sediment to be transported to Ventura County coastal beaches.
	May 3 – Roundtable discussion held at Multi-Purpose Meeting Room, Third Floor Hall of Administration, Ventura County Government Center. The document "Agenda: Decommissioning Matilija Dam," lists the issues discussed. Participants included Ventura County Supervisor John K. Flynn, USFS, BEACON, Friends of the Ventura River, and consultants URS Corporation and Greiner. This document includes the presentation by URS identifying the major issues and concerns associated with dam removal options, particularly alternative removal methods, environmental impacts of dam removal and regulatory issues.
	June 15 – Ventura County Board of Supervisors, *Board Letter, Subject: Adoption of Resolution Supporting the Removal of Matilija Dam.* This board letter cites the efforts currently being undertaken by County staff to secure federal funding to decommission Matilija Dam and recommends adoption of an attached resolution declaring the County's support for dam removal. This resolution acknowledges that Matilija Dam's water storage capacity has been reduced from an original 7,000-acre feet to approximately 500-acre feet due to accumulated sediment, resulting in beach erosion, blocking steelhead migration, and no longer providing flood protection. The resolution cites a diverse group of interests urging the removal of Matilija Dam and the Board herein resolves its support. This item was approved by the Board and the resolution was adopted.
2000	News articles published in the *Ventura County Star* reported on the benefits of decommissioning Matilija Dam and on a demonstration project kicked off by Interior Secretary Bruce Babbitt on October 12, 2000, that removed the top 5 feet of the dam's spillway crest and tested methods of removing the dam's concrete blocks. [A total of 20 news articles from 2000 are archived and available as PDFs.]
	April – Report completed, "Matilija Dam Removal Appraisal Report – April 2000," prepared by Technical Service Center, for USBR. This report estimated that 6 million cubic yards of sediment had accumulated in the Matilija Reservoir. The reservoir was estimated to have approximately 500 acre-feet of storage remaining as of 1997. In November 1999, during the appraisal-level process, a Technical Task Force

Date	Milestone
	Committee examined several possible alternatives for the removal of Matilija Dam. The Committee included members from the U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (now CDFW), Friends of the Ventura River, BEACON, Borcalli and Associates, USACE, California Trout (CalTrout), USFS, NMFS, and the CSCC. Methods for excavation and disposition of the concrete dam and the sediment in the reservoir were considered and evaluated. The appraisal-level alternatives included: 1a) move sediment upstream and stabilize; 1b) removed sediment to downstream site(s) by trucking; 1bb) remove sediment to downstream site(s) by slurry pipeline; 2) phased excavation with natural erosion of sediment; 3) combination of alternatives 1 and 2; 4) one-phase dam removal with natural erosion of sediment; 5) construct fish ladder or bypass with no dam removal; and 6) no action. The report concluded that removal of Matilija Dam is technically feasible and would require an average duration of 2 to 25 years to accomplish in the field, for a total Project cost of between $21,600,000 and $179,400,000 depending on the chosen final removal alternative which could not be recommended at this time due to various unknowns. The report listed further necessary studies.
	June 23 – Report completed, "Drill/Blast Testing Alternatives for Matilija Dam Concrete Removal Methods Evaluation/Demonstration Project," prepared by GEOTEK & Associates, Inc., prepared for Ventura County Flood Control District. This report describes drilling and blasting alternatives for a test program intended to evaluate various methods for sectioning and removing mass concrete at Matilija Dam.
	September – Document completed, "Plans and Specifications for Construction of Matilija Dam Evaluation Demonstration, Specification No. FC01-02," prepared by Ventura County Flood Control District. This document contains the plans and specifications for testing the process of removing precut concrete blocks from the dam crest and conducting a demonstration project on October 12, 2000.
	October 12 – After the USBR completes the Appraisal Study, a high-profile demonstration project to determine the best way to dismantle Matilija Dam was kicked-off in October, attended by politicians, environmentalists, and community leaders. Secretary of the Interior Bruce Babbitt attended and operated a crane to remove a 16,000-pound chunk of concrete from the face of Matilija Dam, a first symbolic step in decommissioning the aging structure. During the demonstration project three cutting techniques were tested, and two diamond wire saw cut blocks were removed from the dam crest and placed in a nearby stockpile area.
	November – USACE completed a Reconnaissance Report that showed federal interest for the MDERP.
	December 4 – Document completed, "Mitigated Negative Declaration for the Robles Diversion Dam Fish Screen and Fishway," prepared by Entrix, Inc., prepared for Casitas MWD. Casitas MWD diverts water from the Ventura River at the Robles Diversion Dam, located approximately 1.4 miles downstream of Matilija and North Fork Matilija Creeks. This document analyzes the potential environmental impacts of modifying the existing Robles Diversion facilities to provide safe upstream passage for adult steelhead and the safe downstream passage of juveniles. The proposed project includes installation of a fishway, fish screen, high- and low-flow fish exit channels, a series of stone weirs, and an at-grade low-flow channel crossing. Provision of fish passage at the Robles Diversion Facilities is a prerequisite to providing passage to the headwaters of the main Matilija Creek and tributaries following the planned removal of Matilija Dam.
2001	News articles published in the *Ventura County Star* and the *Ojai Valley News* discussed Matilija Dam removal funding, noting that the effort received $500,000 from Texaco pollution settlement funds, and reported that the next step for the project is conducting a $4.2 million feasibility study. [A total of four news articles from 2001 are archived and available as PDFs.]
	The MDERP Study was initiated between the Ventura County Flood Control District and the USACE. Work began on the MDERP Feasibility Report and an EIS/EIR in compliance with CEQA and NEPA.
	June 27 – Document completed, "Feasibility Cost Sharing Agreement between the Department of the Army and the Ventura County Flood Control District for the Matilija Dam Feasibility Study." This agreement outlines the Matilija Dam Feasibility Study costs and time frames and the responsibilities of each party for completing the study.
	August – Report completed, "Matilija Dam Removal Demonstration Project 00-351 Final Report," prepared by Ventura County Flood Control District for the NFWF. This report documented the results of the demonstration project that tested various methodologies for removing the Matilija Dam concrete structure. The demonstration project found that diamond wire saw cutting was the most effective concrete

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	removal method followed by pneumatic chipping combined with rebar cutting; hydraulic splitting and using expansive grout were not as effective. The report cautioned that further study may be required.
	December 4 – Report completed, "Summary of Bed Material Sampling in the Ventura River Basin, Matilija Dam Ecosystem Restoration Project, Ventura, CA," prepared by the USBR. This report describes the sediment sampling and analysis performed in the Ventura River from 1 mile upstream of Matilija Dam downstream to the ocean. The sampling results show the riverbed material is dominated by cobbles but includes a large range of sediment sizes with sands interspersed between the larger rocks.
2002	News articles published in the *Ventura County Star* reported on public concern over the cost of dam removal but also focused on its benefits noting that nonprofit groups, including American Rivers, Friends of the River, CalTrout, and the Surfrider Foundation, have banded together to generate momentum for the restoration of the Ventura River and the removal of Matilija Dam. [Two news articles from 2002 are archived and available as PDFs.]
	March – Report completed, "Rainbow Trout and Steelhead Studies in the Matilija Creek/Ventura River Basin – Summary of Activities," prepared by U.S. Geological Survey, Western Fisheries Research Center. This document summarizes the research activities conducted between June 2000 and February 2002 in the Matilija Creek/Ventura River Watershed to examine steelhead populations at the southern extent of their range and provide information for the Matilija Dam removal planning effort.
2003	June 9 – Report completed, "Assessment of Steelhead Habitat in Upper Matilija Basin – Stage One Qualitative Stream Survey," prepared by Thomas R. Payne & Associates. The report concluded that if Matilija Dam is removed and passage is provided past Robles Diversion Dam, steelhead could potentially have access to approximately 8.2 miles of habitat in the mainstem of Matilija Creek, 4.9 miles in the Upper North Fork (including the unnamed tributary), at least 2.3 miles in Old Man Creek, 1.9 miles in Murietta Creek, and 4.3 miles in the Lower North Fork. The upper Matilija Basin (including the Lower North Fork) has the potential to provide significant spawning and rearing habitat for steelhead if access is provided past Robles Diversion Dam and Matilija Dam. The "best" habitat, in terms of accessibility, flow characteristics, gravel quality, and instream habitat, was present in the upper mainstem, the Lower North Fork, and the Upper North Fork. Seasonally dry or intermittent channels (during spring incubation and summer rearing periods), barriers to upstream migration, and mineralized cementation of spawning and food production areas are significant factors that may limit potential production of steelhead in portions of the upper basin, particularly during drought conditions.
	November – Report completed, "Matilija Dam Ecosystem Restoration Project Feasibility Study – Investigations on Alternative Slurry Fine Disposal Sites," prepared by Watershed Protection (formerly known as the Ventura County Flood Control District). This report presents the results of evaluating several alternative sites for the disposal of approximately 2 million cubic yards of fine sediment slurry associated with the removal of Matilija Dam. Nine potential disposal sites along the Ventura River were evaluated based on parcel size, disposal cost, constructability, stockpile height, and environmental impacts.
2004	The Matilija Hot Springs property is purchased by Sephidah and Michael Homayun. The grounds at Matilija Hot Springs are closed to the public as the couple personally used the facilities as a private retreat center.
	News articles published in the *Los Angeles Times* and the *Ventura County Star* reported on the progress of the Matilija task force (made up of state, local, and federal officials, water district representatives, environmentalists, and community members) over the last three years on plans to remove Matilija Dam and restore the Ventura River for endangered steelhead trout. The recommended $130 million demolition plan calls for removal of the dam at once and for the silt to be slowly deposited downriver. The news articles note that although demolition of the dam is still years away, officials say they are seeing progress. [A total of 11 news articles from 2004 are archived and available as PDFs.]
	Stakeholders reach consensus on preferred MDERP points. The MDERP elements for the estimated $124 million project included: dam removal and coarse sediment stabilization upstream of the dam, Camino Cielo bridge modification, Meiners Oaks Levee protection, Robles Diversion high flow bypass, slurry of 2 million cubic yards of fine sediment to disposal sites near Baldwin Road, Live Oak Acres Levee protection, Santa Ana Boulevard bridge modification, Casitas Springs Levee protection, Foster Park wells installation, and Robles Diversion desilting basin construction. The MDERP also included invasive giant reed removal from within the main stem of Ventura River up to the headwaters of Matilija Canyon, creating recreation

Date	Milestone
	features between Baldwin Road to the dam reservoir area, and acquiring real estate to implement the MDERP.
	July – Report completed, "Draft Environmental Impact Statement/Environmental Impact Report (EIS/EIR) for the Matilija Dam Ecosystem Restoration Project," prepared by the USACE with technical assistance from Aspen Environmental Group. The USACE, as lead agency under NEPA, and Watershed Protection, as lead agency under CEQA, prepared this EIS/EIR to analyze potential environmental impacts of the MDERP options at Matilija Dam. This document analyzes the MDERP, which aims to remove both Matilija Dam and accumulated sediment. Removal of Matilija Dam would eliminate a barrier to fish passage on Matilija Creek and facilitate the migration, spawning, and rearing of endangered southern steelhead. Accumulated sediment would be removed or re-configured to improve the Matilija Creek flow regime and ultimately restore Matilija Creek to a more natural pre-dam streambed configuration. This EIS/EIR examines seven project alternatives, including sub-alternatives, for dam and sediment removal plus the No Action Alternative.
	August 30 – Report completed, "Assessment of Steelhead Habitat in the Ventura River/Matilija Creek Basin – Stage Two Qualitative Stream Survey," prepared by Thomas R. Payne & Associates. This Habitat Suitability Index analysis supports previous qualitative assessments that the highest quality habitat for steelhead occurs in the upper Matilija Creek Basin, including the North Fork Matilija Creek. The mainstem Ventura River continues to provide some rearing habitat, as well as an essential corridor for upstream and downstream migrant steelhead. Granting access for steelhead to the upper sub basin beyond Robles Diversion Dam and above Matilija Dam would be expected provide a significant amount of quality spawning and rearing habitat.
	September – Report completed, "Matilija Dam Ecosystem Restoration Feasibility Study Final Report," prepared by the USACE. This report presents the findings of the alternatives analysis and the selection of a recommended plan for the Matilija Dam Ecosystem Restoration Feasibility Study, an effort conducted and coordinated by the USACE, Los Angeles District, and Watershed Protection. Federal, state and local government agencies, environmental resource agencies, interest groups and other stakeholders provided valuable contributions to the evaluation process that resulted in this report. In a consensus decision, Watershed Protection and most of the stakeholder participants of the Plan Formulation Group identified "Alternative 4b" with the addition of a desilting basin as an associated feature as the preferred plan. Alternative 4b is full dam removal in one phase and short-term storage of a portion of the trapped sediment within the reservoir basin. The fine sediment deposited beneath the existing lake (2.1 million cubic yards), would be slurried downstream to a 118-acre disposal site located near the State Route 150 Bridge prior to removal of the dam. A 100-foot-wide channel (base width), with a pre-dam alignment, would be excavated through the reservoir basin to the pre-dam invert (streambed) elevation. The channel side slopes in the lower half of the reservoir basin would be lined with soil cement, approximately 7 feet high. The revetment height would be overtopped by flows exceeding 12,500 cubic feet per second (10-year storm event). Excavated materials are stockpiled in storage areas located within the reservoir basin. Soil cement revetment would offer a higher level of protection in portions of the basin where trapped sediment, or the adjacent stockpiled sediment, contain more fines content. All soil cement would be removed from the site following sufficient removal by erosion of the trapped sediment. The removal would be performed in stages. The total project cost is estimated at $123,700,000. This includes recreation costs ($1,000,000) and the betterment feature (desilting basin) at the Robles Diversion Facility ($5,700,000). The total habitat area that would be restored is 2,814 acres. Technical appendices to the Feasibility Study Final Report include the following: Appendix A Civil Design; Appendix B Structural Evaluation; Appendix C Geotechnical Report; Appendix D Hydrology, Hydraulic, and Sediment Studies; Appendix E Economics; Appendix F Cost Estimates; and Appendix G Real Estate Plan.
	September – Report completed, "Final Environmental Impact Statement/Environmental Impact Report for the Matilija Dam Ecosystem Restoration Project," prepared by the USACE. This Final EIS/EIR includes changes to the Draft EIS/EIR and incorporates responses to comments received during public review of the Draft EIS/EIR. The USACE evaluated alternatives using a variety of methodologies and over a range of variables, examining hydrologic input, downstream sediment and turbidity, flooding, flood protection improvements, beach nourishment and ocean sediment yield, environmental resources, topography, groundwater impacts, completeness, effectiveness, efficiency, acceptability, costs, and benefits. The comparative analysis results led the USACE to choose Alternative 4b as the Recommended Plan for the Proposed Action. Alternative 4b would result in the largest overall increase in habitat value when

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	measuring benefits to steelhead habitat, riparian habitat, and natural hydrologic and sedimentation processes. Alternative 4b would also return a greater amount of sediment to the Ventura River and Ventura County beaches than the other alternatives. Prior to dam removal, various downstream components would need to be constructed or upgraded to protect communities and infrastructure from anticipated increased sediment transport and flood flows. These components include the following: increasing flow capacity under the Camino Cielo and Santa Ana Boulevard Bridges; upgrading existing levees at Live Oak Acres and Casitas Springs; constructing a new levee at Meiners Oaks; modifying the Robles Diversion Facility; construction of a new recreational trailhead at Old Baldwin Road; ongoing habitat enhancement through the removal of invasive giant reed; and construction of two wells at Foster Park.
	December 14 – Letter submitted to the Ventura County Board of Supervisors from Hatch & Parent, A Law Corporation, on behalf of the Southern California Water Company (SCWC), "Re: Final EIS/EIR for the Matilija Dam Ecosystem Restoration Project, Subject: Failure to Comply with the California Environmental Quality Act." This letter claims that the EIS/EIR fails to analyze Project impacts or set forth adequate mitigation measures to ameliorate the adverse and significant water supply impacts of the Project.
	December 14 – The Final EIS/EIR for the Matilija Dam Ecosystem Restoration Feasibility Study was certified, a Record of Decision was published, and the MDERP was approved by the Watershed Protection Board of Supervisors.
	December 20 – USACE Chief's Report completed and sent to Assistant Secretary of the Army. The report, signed by Carl A. Strock, Lieutenant General, U.S. Army, Chief of Engineers, acknowledges concurrence with reporting officer's findings and recommends the Matilija Dam project be constructed in accordance with the recommended plan.
2005	January 3 – Document completed, "Amendment No. 1 to Agreement between the Department of the Army and the Ventura County Flood Control District for the Matilija Dam Feasibility Study." This document amends the original agreement between the two parties dated June 27, 2001. An amendment was necessary because the Project Management Plan was updated with a revised scope of additional work and a related study cost increase. Specifically, the amendment renames references to "Ventura County Flood Control District" to "Ventura County Watershed Protection District" and revises the study cost from "$4,218,000" to "$5,300,000."
	March 31 – Document transmittal, "Biological Opinion for the Matilija Dam Ecosystem Restoration Project, Ojai, Ventura County, California (CON 1-8-04-F-38)," issued by the USFWS to the USACE. This biological opinion (BO) documents the effects of the proposed action of Matilija Dam removal on the federally endangered arroyo toad (*Bufo californicus*), and the threatened California red-legged frog *(Rana aurora draytonii*) and its proposed critical habitat, in accordance with section 7 of the ESA of 1973, as amended. The BO concurs with the determination that project activities may affect, but are not likely to adversely affect the federally endangered southwestern willow flycatcher (*Empidonax traillii extimus*), least Bell's vireo (*Vireo bellii pusillus*), and the candidate western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). The BO concludes that the proposed activities would not affect the arroyo toad since it is not known to occur within the study area. In addition, the BO concludes that the project is not likely to jeopardize the continued existence of California red-legged frog and is not likely to destroy or adversely modify its proposed critical habitat. The BO lists reasonable and prudent measures to minimize the incidental take of California red-legged frogs as well as mandatory terms and conditions and reporting requirements to be followed.
	June – Report completed, "Project Management Plan – Design Phase, Matilija Dam Ecosystem Restoration Project," prepared by the USACE. The primary purpose of this Project Management Plan (PMP) is to establish the scope, schedule, cost, customer interface, and technical performance requirements for the management and control of the design of the MDERP. The PMP sets forth the strategy for coordination between the USACE and Watershed Protection and assigns responsibility for tasks, activities, milestones, real estate requirements, and costs of the Project.
	July – Initiated the Design Phase of the MDERP with a formal agreement between Watershed Protection and the USACE. The overall project cost would be split 65 percent to 35 percent between the USACE and Watershed Protection, respectively. The USACE appropriated $4.2 million for project design between FY05 and FY09.

Date	Milestone
	October 27 – Report completed, "2005 Annual Progress Report for the Robles Diversion Fish Passage Facility and Ventura River Impediment Monitoring," prepared by the Casitas MWD. This document provides monitoring results from data and observations taken during 2004 and 2005, before and during interim operations at the Robles Diversion Fish Passage Facility. Construction of the Fish Passage Facility began in August 2003 and by October 2004, when the first runoff was seen in the Ventura River for the 2004/05 season, most of the Fish Passage Facility components were complete and operable (except for the overshot gate, fish screen cleaning system, control instrumentation, and weir/low-flow crossing modifications).
	December – Report completed, "Matilija Dam Water Quality Monitoring Project," prepared by the Ventura County Watershed Protection District. As part of the USACE Feasibility Study for the removal of Matilija Dam, a $60,000 grant from the U.S. Department of Justice was awarded to Watershed Protection to collect and provide sufficient water quality data to identify the potential impacts to water quality and associated aquatic habitats with the removal of the Matilija Dam. This report summarizes the results of that water quality monitoring effort during the 2003/2004 monitoring season and from collection of additional wet event water quality data during the 2004/2005 winter season. Among other results, the sampling found no exceedances of established water quality standards and no indication of either acute or chronic toxicity.
	September 2 – NMFS issued a final rule designating critical habitat for five Evolutionarily Significant Units (ESUs) of West Coast salmon and two ESUs of steelhead listed as of the date of this designation under the ESA of 1973, as amended.
2006	November – Report completed, "Hydrology, Hydraulics, and Sediment Studies for the Matilija Dam Ecosystem Restoration Project, Ventura, CA – Draft Report," prepared by the USBR, Technical Service Center, Sedimentation & River Hydraulics Group at the request of the USACE consistent with the tasks delineated in the Project Management Plan. This report documents the results of the hydrology, hydraulics, and sediment studies including a flood frequency analysis, flood risk assessment, sediment yield and transport analysis, channel morphology, and future conditions analyses.
2007	March 29 – Document completed, "Biological Opinion for the Matilija Dam Removal and Ecosystem Restoration Project on Matilija Creek, Ventura County, California," issued to the USACE, issued by the NMFS. The BO concludes that the proposed action is not likely to jeopardize the existence of the endangered southern California steelhead or destroy or adversely modify critical habitat for this species. Since the proposed action is likely to result in take of steelhead, an incidental take statement is attached to the BO.
	April 9 – Document completed, "Record of Decision – Matilija Dam Ecosystem Restoration Project," prepared by the USACE. This document, signed by the Assistant Secretary of the Army (Civil Works), determined that based on the Final Feasibility Report and the EIS/EIR dated September 2004 for the MDERP, the recommended action was technically feasible, environmentally sound, economically justified, and in the public interest. This Record of Decision completed the NEPA process for the USACE.
	June – Report completed, "Value Engineering Study Summary Report – Robles Diversion Project," prepared by the USACE, Office of the Chief of Engineers, Value Engineering Study Team. The Robles Diversion Facility is located 2.3 miles downstream of Matilija Dam and includes a 10-foot-high wooden crib dam and sediment basin across the Ventura River, a fish ladder (constructed in 2002), intake screens, diversion control gates, and the top section of a 4-mile-long concrete channel known as the Robles-Casitas Canal. Participants in the value engineering study included members of the USACE, Watershed Protection, Casitas MWD, USBR, NMFS, and the Matilija Coalition. Study participants identified 35 ideas for Robles Diversion Project improvement and/or cost reduction and the report summarized six proposal ideas for consideration. Increased maintenance, modernized infrastructure, and other agreed-upon upgrades will improve the transport of fine and coarse sediment as part of dam removal, address current and future sediment management and associated water supply challenges, and improve endangered steelhead migration both to and from the Ventura River headwaters.
	June – Report completed, "Matilija Dam Giant Reed Removal Plan," prepared by EcoSystems Restoration Associates, prepared for Ventura County Watershed Protection District. The Giant Reed (*Arundo donax*) Removal Project (a component of the larger MDERP) involves removing about 208 acres of invasive giant reed and other target species from approximately 1,274 acres of the Ventura River and Matilija Creek beginning at State Route 150 and extending upstream approximately 15 miles. This report documents the

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	treatment methodology to be used (herbicide use and biomass removal), as well as biological resources, protection measures, and vegetation and water quality monitoring to be conducted.
	June – Report completed, "California Red-Legged Frog Survey Report and Relocation Plan," prepared by EcoSystems Restoration Associates, prepared for the Ventura County Watershed Protection District. Surveys conducted for this report found 100 federally threatened California red-legged frogs upstream of Matilija Reservoir in Reach 7B. The report outlines thresholds for defining when California red-legged frogs should be relocated and describes protection measures to be taken during giant reed removal activities.
	June – Report completed, "Matilija Dam Giant Reed Removal Water Quality Monitoring Plan," prepared by EcoSystems Restoration Associates, prepared for Ventura County Watershed Protection District. To protect water quality in the Matilija Creek and Ventura River watershed during giant reed removal activities, the Ventura County Watershed Protection District will conduct regular monitoring of the surface water in these rivers guided by this Water Quality Monitoring Plan and the Ventura River Watershed Monitoring Program Quality Assurance Project Plan. This report outlines the water quality sampling schedule, methodologies, best management practices, and spill response guidelines for the project.
	June 30 – Report completed, "Steelhead Population and Habitat Assessment in the Ventura River/Matilija Creek Basin – 2006 Final Report," prepared by Thomas R. Payne & Associates. Population abundance of *Oncorhynchus mykiss* was estimated within segment, study site, and habitat type strata. Overall, the estimated abundance of both fry and juvenile+ fish was approximately 8,500 fish. Statistical analysis suggested a strong positive relationship between study site Habitat Suitability Index (HSI) score and abundance of both fry and juvenile-adult *O. mykiss*. The two study sites with the highest HSI scores also contained the highest fish densities, and most of the lower segment study sites had low to moderate HSI scores and low fish densities. Despite the differences in site-specific HSI scores, the overall scores based on stream segment (Ventura River mouth to Robles Diversion Dam, Diversion Dam to Matilija Dam and Lower North Fork, and above Matilija Dam) were relatively consistent with the 2003 study results, with lowest overall scores in the lowest segment and higher and similar scores in the middle and upper segments.
	October 19 – Agreement executed, "Proposition 50 Integrated Regional Water Management (IRWM) Implementation Grant Agreement Between the State Water Resources Control Board and County of Ventura, Watersheds Coalition of Ventura County IRWM Implementation Project, Agreement No. 07-540-550-0." This grant provides $25,000,000 funding for implementing 11 projects identified in the Watersheds Coalition of Ventura County IRWM Plan. The San Antonio Creek Spreading Grounds Rehabilitation (V-2) Project (component 10) received $1,315,000 to increase groundwater storage and recharge in the Ojai Valley Groundwater Basin by rebuilding the abandoned diversion works, rehabilitating the spreading ground basins (existing relict ponds), and constructing passive percolation recharge wells adjacent to San Antonio Creek, approximately 1.1 miles north of the State Route 150/Carne Road intersection in the Ojai Valley. The scope of this grant included preparation of 50-percent and final design plans, CEQA document preparation, regulatory permitting, easement acquisition, and construction of project facilities. Implementation of this groundwater recharge project was important to address concerns raised in the December 14, 2004, letter from Hatch & Parent, on behalf of SCWC, to the Board of Supervisors regarding the claim that the MDERP EIS/EIR fails to set forth adequate mitigation measures to ameliorate the adverse and significant water supply impacts of the MDERP.
	November – Congress authorized the MDERP in the Water Resources Development Act (WRDA) of 2007 for $144.5 million.
2008	By 2008, Alternative 4b (identified as the preferred plan by Watershed Protection and most of the stakeholder participants of the Plan Formulation Group in the 2004 Feasibility Study) fell out of favor with MDERP stakeholders due to concerns over increased costs, water use, and environmental issues such as long-term sediment trickle into the Ventura River. Alternative 4b proposed full dam removal in one phase, short-term storage of a portion of the trapped sediment within a reservoir basin, and slurrying the fine sediment deposited beneath the existing lake (2.1 million cubic yards) to a 118-acre disposal site located near the State Route 150 Bridge prior to removal of the dam. Stakeholders are now requesting additional sediment handling alternatives be developed and considered.
	April – Report completed, "Two-Dimensional Numerical Model Study of Sediment Movement at the Robles Diversion Dam on the Ventura River, California," prepared by USBR, Technical Service Center. This report presents the results of a numerical model study of the proposed high flow bypass (HFB) spillway for Robles

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	Diversion Dam. Results show the existing radial gates at Robles Diversion are not capable of efficiently moving the additional sediments added after removal of Matilija Dam located approximately 2 river miles upstream. The proposed HFB gates would be capable of moving sediments efficiently once the dam is removed and there is less likelihood for the bedload sediments to enter the diversion canal.
	June 30 – Report completed, "Steelhead Population and Habitat Assessment in the Ventura River/Matilija Creek Basin – Final Report 2007," prepared by Thomas R. Payne & Associates. A total of only five *O. mykiss* were observed in the lower three study sites below Robles Diversion Dam. The highest abundance of *O. mykiss* occurred in the upper segment above Matilija Dam with an estimated 6,294 fry and 1,192 juvenile+ fish. The 2007 estimates were consistent with 2006 estimates in showing that abundance of *O. mykiss* was zero or near zero in the lower segment below Robles Diversion Dam, intermediate in the middle segment above the diversion dam (mostly due to high densities in the Lower North Fork Matilija Creek), and highest in the upper segment above Matilija Dam.
	July – Report completed, "Phase I Environmental Site Assessment: Matilija Hot Springs/Matilija Sanctuary Facility," prepared by Padre Associates, Inc., prepared for Ventura County Watershed Protection District. This document was prepared to assess the site conditions at the subject property prior to any renovations or razing of any structures or facilities in association with the MDERP. The objective of this study was to evaluate whether current or previous land uses or practices at or adjacent to Matilija Hot Springs involved the use, storage, and/or disposal of hazardous substances or petroleum hydrocarbons which may have resulted in a recognized environmental condition at the site.
	September – Report completed, "Phase I Pipeline and Multi-Use Recreational Trail Alignment Study, Matilija Dam Ecosystem Restoration Project," prepared by PB Americas Inc. for the U.S. Army Corps of Engineers. This study explores the potential slurry and water supply pipeline alignments between Matilija Dam and the Meiners Oaks Levee and recreation trail alignments from the Los Padres National Forest trails in Matilija Canyon to the State Route 150 bridge on the Ventura River. The report identifies a range of conceptual alignments building upon the alternatives identified in the feasibility study, and outlines screening criteria, design parameters, and constraints associated with each option. The report concludes that additional coordination with the Design Oversight Group and local stakeholders would be needed to refine the conceptual alignments.
	September – Report completed, "Robles Diversion Dam High Flow and Sediment Bypass Structure, Ventura, California," prepared by USBR. The focus of this study is the hydraulic design of a new HFB spillway for the Robles Diversion Dam in association with the removal of Matilija Dam located approximately two miles upstream. The HFB will improve the movement of bed load sediments past the diversion structure. This report covers physical modeling of the diversion facility conducted at the USBR Water Resources Research Laboratory (WRRL) in Denver, Colorado. The primary objectives of this model study are to evaluate the HFB spillway effectiveness for reducing the impact of future increases in sediment load on canal operation and fish passage.
	September 23 – Matilija Hots Springs returns to the ownership of the County of Ventura when Watershed Protection purchases the property from Sephidah and Michael Homayun.
	September 24 – Report completed, "Report on Findings: Slurry Fine Disposal Sites, Matilija Dam Ecosystem Restoration Project," prepared by Watershed Protection. This report addresses slurry disposal sites identified in the Ventura River channel for disposal of sediment (slurry fines) to be removed from behind Matilija Dam prior to its deconstruction. The report characterizes the two top candidate slurry disposal sites, Meiners Oaks Disposal Area (MODA) and Baldwin Road Disposal Area (BRDA) and discusses their relative pros and cons.
	December – Report completed, "Matilija Ecosystem Restoration Meiners Oak and Live Oak Levees Draft Construction Solicitation and Specifications," prepared by USACE, Los Angeles District. This draft document provides the construction specifications for planned improvements at Meiners Oak and Live Oak Levees in Ventura County.
2009	
	By early 2009, cost estimates for handling the fine sediment stored behind the dam doubled from estimates given in the Feasibility Study of Alternative Slurry Fine Disposal Sites prepared by Watershed Protection in November 2003. In response, the USACE developed additional sediment handling alternatives which were presented and discussed with the DOG at their September 16, 2009, meeting.

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	February – Report completed, "Summary Report: Property Inspection of Matilija Hot Springs Sanctuary," prepared by Checkpoint Inspection Service, prepared for Watershed Protection. This report identifies the conditions and components of the property requiring service which should be completed prior to closing of escrow on the subject property.
	June 24 – Report completed, "Limited Dam-Break Inundation Study for Matilija Dam and Reservoir, State Dam No. 86-000, Ojai, California," prepared by Genterra Consultants, Inc., prepared for Watershed Protection. This report presents the results of a technical study based on a sudden breach failure of Matilija Dam. The failure scenario envisions the complete collapse of a 360-foot-wide portion of the dam. It was assumed for the purposes of this study that this scenario could occur with or without an earthquake, during the time of a probable maximum flood event. This report includes an inundation map depicting the extent of downstream flood inundation that would occur as a result of such a dam breach failure.
	July – Report completed, "Robles Diversion Dam Modification Design Documentation Report, Matilija Dam Ecosystem Restoration Project," prepared by Tetra Tech for the USACE. This Design Documentation Report (DDR) provides the basis for design of the Robles Diversion Dam Modification flood control project which would mitigate for the increased sediment loading and flood flows from removal of Matilija Dam approximately 2 miles upstream. The DDR presents the design for the recommended plan, the estimated construction cost, and the schedule for the Robles Diversion Dam Modification project. The recommended plan includes the design and construction of a high flow bypass spillway consisting of four 30-foot-wide x 12-foot high Tainter gates, USBR stilling basin, and an additional high flow fishway/ladder. The existing dam embankments would be raised to elevation 769 and an armored rock ramp spillway provided for the embankment and downstream channel bed to protect the diversion dam from scour damage and increase the diversion dam's storm capacity to a 20-year level of protection.
	July 30 – Report completed, "Steelhead Population Assessment in the Ventura River/Matilija Creek Basin – 2008 Summary Report," prepared by Thomas R. Payne & Associates. Overall, 96 pool habitat units and 32 flatwater units were sampled in the Ventura /Matilija Basin Steelhead resulting in a total dive count of 104 southern California steelhead fry and 865 juvenile+ fish. Large differences in streamflows, overall availability, and quality of fish habitat occurred between 2005 and 2008. The most consistent and prominent trend was the 2008 decline in abundance of fry and the concomitant increase in juvenile+ *O. mykiss*. The dramatic change in abundance of *O. mykiss* in the Ven 3 study site, from near zero density in 2006 and 2007 to the highest density of all study sites in 2008, illustrates the variability in annual rearing densities in Southern California watersheds and the usefulness of long-term studies to adequately describe "baseline" conditions prior to major restoration projects.
	October – Report completed, "Matilija Dam Ecosystem Restoration Project Giant Reed Removal Water Quality Monitoring Report August 2007 – August 2009," prepared by Watershed Protection. This report documents the results of water quality monitoring to test for herbicide residue conducted during the giant reed removal activities in the Ventura River and Matilija Creek. Results showed that glyphosate was not detected in any samples during the project period of August 2007 through August 2009.
	December 15 – Ventura County Board of Supervisors, *Board Letter, Subject: Authorization for the Director of the Watershed Protection District to Sign the Attached "2010 Water Table A Water Non-Objection Agreement" Between the City of Ventura With the Casitas Municipal Water District, and the Watershed Protection District regarding the Proposal By the Two Entities to Pursue the Options for the Sale, Exchange, or Transfer of Their 2010 Table A State Water Project Water; Supervisorial District 1, Watershed Protection District 1.* The Matilija Dam operations agreement is renewed between Watershed Protection and Casitas MWD, and the Matilija Conduit is transferred to Casitas MWD. This item was approved by the Board.
	December 31 – Report completed, "Matilija Dam Ecosystem Restoration Project Giant Reed Removal Element Post-Treatment Vegetation Monitoring Program," prepared by Hunt & Associates Biological Consulting Services, prepared for Watershed Protection. This report documents the monitoring protocol and baseline conditions for monitoring the response of native and non-native vegetation following implementation of the Matilija Giant Reed Removal Project along Matilija Creek and portions of the upper main stem of the Ventura River from September 2007 to October 2009. The report concludes that treatment of invasive vegetation was highly successful in reducing infestation and percent cover, and native species are recolonizing treated substrates at a 2:1 ratio compared to non-native species; however, re-sprouting of giant reed continues to be a problem despite five retreatment cycles to date. The report recommends future monitoring to track restoration progress.

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2010	January 11 – Report completed, "Steelhead Population Assessment in the Ventura River/Matilija Creek Basin – 2009 Data Summary," prepared by Thomas R. Payne & Associates. In 2009, only four study reaches were surveyed due to funding constraints. The most notable differences in southern California steelhead abundance in 2009 from prior surveys were the continued presence of juveniles in the Ven 3 study site and the lack of fish in the Ven 5 site. In both 2006 and 2007, a few *O. mykiss* were observed in one of 22 sampled habitat units (the San Antonio Creek confluence pool or the pool immediately downstream) in the Ven 3 study site, resulting in near zero abundance estimates each year. In contrast, *O. mykiss* were observed in 9 of 13 sampled units in 2008, often in high density. Although numbers of *O. mykiss* were lower in 2009, fish were observed in six of 14 sampled units resulting in the highest abundance of juvenile+ fish among the four study sites sampled in 2009.
	January 14 – Project stakeholders rejected all alternatives developed by the USACE due to concerns with soil cement bank protection in Matilija Canyon and placement of slurried fine sediment outside of the active channel. The DOG requested additional studies to determine if a constructable alternative could be developed to permanently sequester fine sediments upstream of Matilija Dam.
	June – Report completed, "Final Mitigated Negative Declaration and Initial Study for the California River Parkways Trailhead Project – A Component of the Matilija Dam Ecosystem Restoration Project," prepared by Aspen Environmental Group, prepared for Watershed Protection. This report analyzed the potential environmental impacts of constructing a new trailhead and parking area at the existing Ojai Valley Land Conservancy trails network on Old Baldwin Road in the Ojai Valley of unincorporated Ventura County. The project contributes to the Recreation Plan goals of the Matilija Dam Ecosystem Restoration Project. This Final MND/IS includes changes to the Draft MND/IS circulated for public comment in April 2010 and incorporates responses to comments received during public review.
	June 30 – Document completed, "Sediment Management and Restoration Opportunities for the Matilija Dam Ecosystem Restoration Project," prepared by the Matilija Coalition. The Matilija Coalition is an alliance of community groups, businesses, and individuals committed to the environmental restoration of the Ventura River watershed. In this document, the Matilija Coalition outlines several potential solutions to the sediment management issues associated with dam removal. The conceptual design for upstream sediment management described in the 2004 Feasibility Report specifies *temporary* sediment disposal areas which were carefully selected to minimize impacts to existing habitat and provide for the restoration of a naturally meandering channel upstream of the current dam site. In response to a recent proposal to *permanently* sequester fine sediments in Matilija Canyon, the Matilija Coalition reframes the sediment question as "Can the restoration of Matilija Canyon be designed in a manner consistent with the Feasibility Study plan so that (a) a meandering stream channel is constructed of natural material upstream of the current dam site, and (b) sediments are managed so that downstream interests are not unduly impacted and project objectives are optimized?"
	September – Watershed Protection, USACE, and CSCC form the Fine Sediment Study Group comprised of key stakeholders to discuss issues relating to the management of approximately two million cubic yards of fine sediments that are sequestered behind Matilija Dam.
	September – Document completed, "Long Range Adaptive Management Plan," prepared by Ventura County Watershed Protection District with input from the Matilija Dam Removal Environmental Working Group and Technical Studies Working Group. The Monitoring and Adaptive Management Plan provides an essential element in the overall implementation of the proposed habitat restoration plan. It provides an opportunity to review and evaluate the performance of the implemented restoration measures during and after the removal of Matilija Dam, and to make adaptive changes, if required, to obtain project goals of restoring the pre-dam natural ecology of Matilija Creek and allowing species to have unobstructed access to and from the upper watershed habitat.
2011	June 30 – Report completed, "Steelhead Population Assessment in the Ventura River/Matilija Creek Basin – 2010 Data Summary," prepared by Normandeau Associates. In 2010, 11 of the original 12 study reaches were sampled, plus one new location was sampled on San Antonio Creek. In most previous years, overall abundance was highest in the upper basin segment above Matilija Dam, intermediate in the middle basin segment between Robles Diversion Dam and Matilija Dam, and much lower in the lower basin segment. In 2010, overall abundance was relatively similar between the middle basin and upper basin segments, and the lower basin segment contained over 20% of the basin-wide abundance of juvenile+ southern California

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	steelhead (not including San Antonio Creek). The 2010 data again illustrated the importance of the mainstem Ventura River near the San Antonio Creek confluence for rearing southern California steelhead.
	August – Report completed, "Matilija Dam Ecosystem Restoration Project Fine Sediment Study Group Final Report," prepared by Study Group Sponsors and Mary Selkirk, Center for Collaborative Policy, California State University (CSU) Sacramento. This report documents the findings from four full day facilitated meetings. The primary goals of the facilitation included identifying technical studies and other investigations that could help produce a consensus solution for fine sediment management that would still conform, to the extent practicable, to the existing environmental and decision documents for the Matilija project.
	September – Construction completed on the California River Parkways Trailhead Project in the Ojai Valley, a recreational component of the Matilija Dam Ecosystem Restoration Project.
	October – Technical Advisory Group formed and scopes of work for recommended studies were developed by December 2012.
	November 15 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of Amendment 4 to Agreement 07-185 Between the Ventura County Watershed Protection District and the State of California Coastal Conservancy, Adding the Amount of $675,000 to the Grant Amount of $4.5 Million, for Studies and Projects Related to the Matilija Dam Ecosystem Restoration Project; Authorization for the Director of the Watershed Protection District to Sign the Amendment to the Agreement, and Authorization for the Auditor/Controller to Process the Accounting Transactions Necessary to Increase Appropriations and Revenue in Fund 1710; Supervisorial District 1, Watershed Protection District 1.* This amendment to Agreement 07-185 originally approved by the Board on June 17, 2008, provides funds for Watershed Protection to conduct additional MDERP studies and design of the Camino Cielo and Santa Ana Boulevard Bridges. This item was approved by the Board.
2012	January – Document issued, "Southern California Steelhead Recovery Plan," prepared by NMFS, Southwest Regional Office. The goal of this Recovery Plan is to prevent the extinction of southern California steelhead in the wild and to ensure the long-term persistence of viable, self-sustaining populations of steelhead distributed across the Southern California Distinct Population Segment (DPS). This comprehensive 563-page recovery plan documents the status of the southern California steelhead, describes factors leading to federal listing, assesses current DPS-level threats, and lists recovery goals, strategies, actions, and cost estimates. Pages 9-41 through 9-46 list recovery actions for the main stem of the Ventura River, which include providing fish passage around dams and diversions, removing fish passage barriers, and developing and implementing water management plans for dam and diversion operations (namely Matilija and Casitas dams, and Foster Park and Robles diversions).
	May 17 – Agreement executed, "Grant Agreement Between the State of California (Department of Water Resources) and County of Ventura Agreement Number: 4600009703 Integrated Regional Water Management (IRWM) Implementation Grants California Public Resources Code §75026 Et Seq." This grant provides a maximum amount of $17,510,599 to implement eight projects identified in the Watersheds Coalition of Ventura County IRWM Plan.
	June 30 – Report completed, "Steelhead Population Assessment in the Ventura River/Matilija Creek Basin – 2011 Data Summary," prepared by Normandeau Associates. Although the 2006-2011 studies demonstrate that most *O. mykiss* reside above Matilija Dam, the 2011 data again illustrated the importance of the mainstem Ventura River near the San Antonio Creek confluence for rearing *O. mykiss*. Also, 2011 was the first year of sampling when juvenile+ *O. mykiss* were observed in the lowest mainstem reach of the Ventura River (Ven 1), with observations in one pool and in three flatwater habitats.
	November – Report completed, "Historical Resources Assessment – Matilija Hot Springs," prepared by Pamela J. Huckins, PhD. This report assesses and summarizes the historical significance of the cultural landscape, buildings, and swimming pool located at Matilija Hot Springs, 786 and 788 Matilija Canyon Road, Ventura County in the Unincorporated Area of Ojai. The entire 9.22-acre site—including buildings and structures, the hot water springs, a cold-water spring, and easements thereto—is listed as Ventura County Landmark #25. The built features at Matilija Hot Springs date from 1902 to the early 1990s.
2013	June – AECOM and Stillwater Sciences selected as consultants for MDERP studies. They complete the recommended studies between February 2014 and March 2016 under a Watershed Protection contract paid for with a grant from the California Coastal Conservancy.

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	June 18 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of the Proposition 84 Integrated Regional Watershed Management Subgrant Agreement Between the County of Ventura and the County Watershed Protection District, Providing Funding in the Amount of $500,000 for the District's Phase 2 San Antonio Creek Spreading Grounds Rehabilitation Project; Watershed Protection District Zone 1; Supervisorial District 1.* This subgrant agreement executed by the Ventura County CEO and the Watershed Protection Board Chair provides $500,000 to fund construction implementation of the San Antonio Creek Spreading Grounds Rehabilitation Project. This Proposition 84 subgrant was an important financial supplement (to original funding from Proposition 50) making project bid advertisement and construction of this important groundwater recharge project possible.
	A structural evaluation of Matilija Dam completed by URS concluded that the "deterioration of the concrete strength and stiffness is not expected to significantly affect the safety of the dam over the next 10 to 25 years." However, DSOD continues to be concerned about the safety of Matilija Dam.
2016	March – Report completed, "Matilija Dam Removal, Sediment Transport, and Robles Diversion Mitigation Project – Dam Removal Concepts Evaluation Report," prepared by AECOM and Stillwater Sciences. This report documents the technical components of the three shortlisted dam removal concepts, the criteria developed to evaluate the concepts, the methods and metrics utilized to address or populate the criteria, and the associated evaluation results. The three concepts evaluated are DRC-1: Containment Berm with High Flow Bypass, DRC-2A/2B: Uncontrolled Orifices with Optional Gates, and DRC-3: Temporary Upstream Storage of Fine Sediment.
	March – Report completed, "Matilija Dam Removal, Sediment Transport, and Robles Diversion Mitigation Project – Water Supply Mitigation Options Evaluation Report," prepared by AECOM. This report considers a range of possible impacts associated with flushed sediment on each of the major water providers in the Ventura River watershed and identifies and evaluates potential options to offset any lost water supply related to the flushing of accumulated fine sediment under each of the three preferred dam removal concepts. Of the 23 mitigation options presented, the report recommends seven for further analysis.
	March 17 – The DOG reaches consensus on new approach to sediment management in conjunction with dam removal, selecting Dam Removal Concept 2A (DRC-2A) by member vote during the DOG March 17, 2023, meeting. DRC-2A consists of boring two 12-foot orifices near the base of the dam. Prior to a flushing storm event (about a 4-year flood), the 12-foot orifices would be charged with explosives to release the remaining concrete on the upstream side of the dam and the fine sediment behind the dam would be flushed downstream to the ocean. DRC-2A is similar to alternatives evaluated during the Feasibility Study in that it allows all the fine and coarse sediment to be naturally transported in an uncontrolled manner to the ocean. Casitas MWD agrees that DRC-2A should be ranked the highest of the concept alternatives studied by AECOM/Stillwater Sciences as it will have the shortest impact on Robles Diversion. Environmental stakeholders now support natural sediment restoration due to results from the AECOM/Stillwater Sciences study and recent dam removal projects at Elwha and Glines Canyon Dams (Elwha River) in Washington State (2012), Condit Dam (White Salmon River), in Washington State (2011), Marmot Dam on Sandy River in Oregon (2007) and proposed Klamath River system dam removal projects.
2017	With grant funding from the Resources Legacy Fund and Hewlett Foundation's Open Rivers Fund, a Matilija Funding Sub-Committee (consisting of representatives from Watershed Protection and agency representatives, non-governmental organizations, and Patagonia) developed the Matilija Dam Removal and Ecosystem Restoration Project Funding Plan.
	May 23 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Authorization for, the Acceptance of $3,300,504 in California Department of Fish and Wildlife (CDFW) Restoration Grant Funding for the Matilija Dam Removal 65% Design Planning Project; Authorization for the Ventura County Watershed Protection District (District) Director to Execute the Grant Agreement; and Authorization for the Chair of the Board to Sign the Resolution Accepting the Grant, Supervisorial District 1, District Zone 1.* The District, with cost shared grant funding or USACE funding, has completed or partially completed the following project components: Camino Cielo bridge modification (concept design), Meiners Oaks levee protection (90% design), Robles Diversion high flow bypass (90% design), Live Oak Acres levee protection (90% design), Santa Ana Boulevard bridge modification (100% design), Casitas Springs levee protection (partial completion of needed improvements; planning and design required for remaining improvements), Foster Park wells (well drilling and development, Phase 2 100% design), *Arundo donax* (removal upstream of Baldwin Road), recreation (completion of California River Parkways Trailhead at Baldwin Road), and real

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	estate (acquisition of Matilija Hot Springs). From 1999 to 2017, approximately $29.7 million has been spent on the Matilija Dam project, with contributions of $16 million from the state, $7.3 million from the USACE, $7.0 million from Watershed Protection and $0.7M from private non-profit organizations. This grant from CDFW provides for an additional $3,300,504 to support the Matilija Dam Removal 65% Design Planning Project comprising additional technical studies, construction design, and updated CEQA analyses. This item was approved by the Board.
	September 12 – Ventura County Board of Supervisors, *Board Letter, Subject: Authorization for the Ventura County Watershed Protection District Director to Execute an Agreement for a Grant for the Matilija Dam Ecosystem Restoration Project: Estuarine and Coastal Modeling From National Fish and Wildlife Foundation Impact-Directed Environmental Accounts Program Funds in the Amount of $278,002; Determination that the Project is Exempt from the California Environmental Quality Act; and Authorization for the Auditor-Controller to Process the Necessary Budgetary Transactions; Watershed Protection District Zone 1, Supervisorial District No. 1.* This grant from NFWF funds detailed modeling of sediments delivered to the Ventura River estuary and nearshore waters as a result of the removal of Matilija Dam and assessment of potential effects on estuarine and marine habitats. This item was approved by the Board.
2018	December 4 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Authorization for the Director of the Ventura County Watershed Protection District to Execute, a Grant Agreement for an Invited Grant Through the Open Rivers Fund, a Program of Resources Legacy Fund Supported by the William and Flora Hewlett Foundation, in the Amount of $80,000 for Right of Way Acquisitions and Appraisal Project; and Authorization for the Auditor-Controller to Process the Necessary Accounting Transactions; Supervisorial District 1, Watershed Protection District 1.* This grant from the Resources Legacy Fund awards funds to Watershed Protection to acquire Santa Ana Boulevard Bridge easements and for property appraisals for Camino Cielo Bridge improvements rights of way to support the MDERP. This item was approved by the Board.
2019	March – Report completed, "Addendum to the Matilija Dam Ecosystem Restoration Feasibility Study Final EIS/EIR for the Santa Ana Boulevard Bridge Replacement Component of the Matilija Dam Ecosystem Restoration Project," prepared by Watershed Protection (CEQA Lead Agency), prepared for USACE (NEPA Lead Agency). This document describes project component changes and additional design details for the Santa Ana Boulevard Bridge Replacement Component of the MDERP as compared to the conceptual-level description provided in the 2004 Final EIS/EIR. The detailed engineering design includes replacement of the existing Santa Ana Boulevard Bridge with a 350-foot-long, three-span cast-in-place or pre-stressed concrete box girder on a new upstream alignment. The new bridge eliminates current and future concerns with increased sediment transport (which will occur with or without Matilija Dam removal) while enhancing endangered southern California steelhead migration through the reach.
	June 18 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Authorization for, the Acceptance of $13,426,939 in California Department of Fish and Wildlife Proposition 1 Fiscal Year (FY) 2019-2020 and Proposition 68 FY 2018-2019 Restoration Grant Program Funding for the Santa Ana Bridge Replacement – a Component of the Matilija Dam Restoration Project; Authorization for the Ventura County Watershed Protection District Director to Execute the Grant Agreement; and Authorization for the Chair of the Board to Sign the Resolution Accepting the Grant; Supervisorial District 1, District Zone 1.* This grant from CDFW provides $13,426,939 to Watershed Protection to replace the bridge that crosses the Ventura River at Santa Ana Boulevard with a wider and higher bridge. The grant agreement provides funds for preparing final design plans and bid documents, obtaining environmental permits, real estate support, project construction, biological monitoring, and long-term maintenance. This item was approved by the Board.
	July 10 – Report completed, "Summary Report on Biological Surveys, Permit Compliance Monitoring, and Inspection, Matilija Creek Giant Reed Re-Treatment Project," prepared by Hunt & Associates Biological Consulting Services, prepared for Ventura County Watershed Protection District. The Giant Reed Removal Element of the MDERP began in September 2007 and re-treatments have generally continued at least once, and up to three times, per year since then. This report summarizes work progress and the invasive vegetation removal results of the 18th re-treatment session conducted from May 28, 2019, to June 18, 2019).
	November – Report completed, "Matilija Dam Removal Ecosystem Restoration Project Estuarine and Coastal Modeling," prepared by Integral Consulting Inc. Modeling of the estuary and local coast described

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	in this report provides high fidelity tools for characterization of both the initial sediment pulse released from dam removal and the subsequent restored river sediment loads to address the concerns of sensitive species impacts, future flood potential, and estuarine and coastal process impacts. Among other findings, the report concluded that the long-term effect of restored sediment loading to the coastal system is minimal (only 7 percent increase in estimated pre- and post-dam removal total sediment load).
	December – Watershed Protection begins demolition of the remnants of the historic Matilija Hot Springs resort after the devastating 2017 Thomas Fire left the remaining structures in rubbles. A historic marker was erected documenting the cultural significance of the site. The 9.2-acre property is anticipated to be used as a staging area for the removal of the Matilija Dam and later turned into a public recreation area.
2020	February – Technical report completed, "Matilija Dam Removal 65% Design Subtask 2.2: Detailed Sediment Transport Modeling from Matilija Dam to Downstream to Ventura River Delta," prepared by Stillwater Sciences. This report uses analyses and modeling to: a) provide an estimate of when sediment is likely to fill to the top of Matilija Dam if the dam is left in place; b) provide an estimate of the sediment load near the mouth of the Ventura River following dam removal that can be used as input for subsequent estuary sediment transport modeling; c) revisit the fine sediment transport analyses to examine the consequences if water discharge in Matilija Creek fails to reach the design discharge; and d) refine and finalize the DREAM-2 model to examine coarse sediment transport dynamics following Matilija Dam removal under the uncontrolled orifice option (i.e., open up tunnels near the base of the dam prior to a storm event to initiate sediment erosion).
	February – Technical report completed, "Matilija Dam Removal 65% Design Subtask 2.3: Hydraulic Studies to Determine 100-year Water Surface Elevations," prepared by Stillwater Sciences. This technical report describes the hydraulic analyses used to determine potential increases in flood risk associated with future conditions following dam removal, along Matilija Creek and Ventura River, from the dam to the estuary. The report found that as the released coarse sediment pulse moves downstream immediately following dam removal, the area upstream from Robles Diversion Dam is expected to experience increases in 100-year water surface elevations (WSEs) of 2 to 6 feet (above current conditions with the dam in place). As the released impoundment sediment stabilizes and the natural sediment transport regime from upstream of the Matilija Dam is restored, the main long-term impacts are predicted to occur 1 to 2 miles downstream from Robles Diversion Dam, where long-term WSE increases of 2 to 3 feet (above current conditions with the dam in place) should be expected.
	June 9 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Ratification of the Execution of, the Grant Agreement Between the Ventura County Watershed Protection District and the Wildlife Conservation Board for $5,025,000 in Grant Funding for the Matilija Dam Removal – Final Design Project; Supervisorial District 1, Watershed Protection District 1.* This grant from the Wildlife Conservation Board provides funds to complete final designs for Matilija Dam removal and for three downstream levee improvement projects that are essential components of the MDERP. This item was approved by the Board.
	August 21 – Document completed, "Camino Cielo Bridge Replacement Alternatives Evaluation Memorandum," prepared by Dokken Engineering, prepared for Watershed Protection. This memorandum evaluates three alternative designs for replacing the Camino Cielo Bridge as part of the MDERP. Evaluation criteria include design considerations, rights of way, hydraulics, environmental impacts, construction and mitigation costs, and resident impacts. The evaluation concludes that Alternative 2A or 2B (constructing a new bridge just upstream of existing bridge) is the preferred alternative, with estimated construction costs ranging between $19 million and $21 million for construction in the year 2024.
	September – Notice of Preparation Matilija Dam Ecosystem Restoration Project Subsequent Environmental Impact Report. Watershed Protection solicits input from interested persons and agencies as to the scope and content of the MDERP Subsequent Environmental Impact Report (SEIR).
	November – Report completed, "Live Oak Acres Levee Project Intermediate Design, Basis of Design and Alternatives Report," prepared by Tetra Tech, prepared for the Ventura County Watershed Protection District. The Live Oak Acres Levee is situated along the west embankment of the Ventura River in the unincorporated community of Oak View, approximately six miles downstream of Matilija Dam. The levee system extends approximately 1.3 miles from the Santa Ana Boulevard Bridge upstream to the Live Oak Diversion outlet; it includes embankment levees, flood walls, high ground, and side drainage penetrations. The levee is intended to protect rural residential properties in low-lying areas of the floodplain in the adjacent Live Oak Acres community, but it does not meet Federal Emergency Management Agency (FEMA)

Date	Milestone
	certification requirements. Reconstruction as part of the MDERP will bring the Live Oak Acres levee system up to FEMA standards to protect the adjacent community and to accommodate future sediment deposition and flood flows following Matilija Dam removal. The two intermediate design alternatives considered in this report include levee bank protection using 30-inch-thick grouted stone riprap along the 1.3-mile levee length. Alternative 1 proposes a levee bank slope of 1.5H:1V while Alternative 2 proposes a shallower levee bank slope of 2H:1V which would result in a larger area of impact within the Ventura River.
2021	January – Construction specifications and bid document completed, "RD21-03 Matilija Dam Ecosystem Restoration - Santa Ana Blvd Bridge Replacement," prepared by Quincy Engineering and Ventura County Public Works Agency. This document provides the specifications and contractor bid information for the Santa Ana Blvd Bridge Replacement Project.
	March – The Santa Ana Blvd Bridge Replacement construction project was awarded to Security Paving on March 9, 2021, with a completion date of December 22, 2022.
	March 25 – Report completed, "Matilija Dam Ecosystem Restoration Project: Camino Cielo Bridge Design Staff Recommendation Report," prepared by the CSCC, prepared for Watershed Protection. This report describes the need for redesign of the Camino Cielo Bridge located at the intersection of State Route 33 and Camino Cielo downstream of Matilija Dam. The release of sediment following the removal of Matilija Dam is expected to result in significant aggradation in the reaches directly below the dam. This aggradation will likely bury the current Camino Cielo crossing, making replacement a critical component of MDERP. Currently, the Camino Cielo Road crossing, which consists of a set of concrete box culverts, requires repair and maintenance following each major storm event to restore access to adjacent properties. The new bridge project is requisite to manage increased sediment flows following the removal of Matilija Dam. Current design alternatives contemplate construction of a new span-type bridge with increased elevation to accommodate current and future sediment flows; removal of the existing box culverts; and installation of bank protection for the new road infrastructure that will be needed as part of a higher-elevation bridge. The new bridge will lessen current and future concerns with increased sediment transport (pre- and post-dam removal), enhance steelhead migration through the Camino Cielo reach, avoid the current need for instream repairs and maintenance after major storm events, and provide unimpeded access to existing residences south of the Ventura River.
	June 7 – The Santa Ana Boulevard Bridge Replacement Project groundbreaking ceremony was held on site and project construction began.
	November 9 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Ratification of the Execution of, the Grant Agreement Between the Ventura County Watershed Protection District and the State Coastal Conservancy for $734,730 in Grant Funding for the Camino Cielo Bridge Design Project; and Approval of and Adoption of a Resolution of Acceptance for Grant Funding; Supervisorial District 1, Watershed Protection District 1.* This grant from the SCC provides funds to complete 70 percent design for the new Camino Cielo Bridge over the Ventura River, which will replace the current box culvert crossing in that area. The new bridge design will improve fish passage for endangered steelhead and will safely pass the increased sediment flows associated with the removal of Matilija Dam. The grant also includes partial preparation of CEQA documentation for the project. This item was approved by the Board.
2022	March – Report completed, "Ventura River Levee 2 (VR-2) Levee System Preliminary Design Project Study Report," prepared by Tetra Tech, prepared for Watershed Protection. The Casitas Springs Levee is located along the east embankment of the Ventura River near the unincorporated community of Casitas Springs, approximately nine miles downstream of Matilija Dam. The mile-long levee system – also known as the Ventura River 2 (VR-2) levee – currently consists of rock riprap protected earthen embankment levees, flood walls, high ground, and side drainage penetrations, but it does not meet FEMA certification requirements. Three preliminary design alternatives for future FEMA certification are under consideration that will protect the Casitas Springs community and accommodate future sediment flows resulting from removal of Matilija Dam. The first design alternative focuses on upgrading the existing levee at its current location, while the second and third include a setback alignment to widen the river floodplain.
	October 11 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Ratification of the Execution of, the Grant Agreement Between the Ventura County Watershed Protection District and the California Department of Fish and Wildlife Proposition 1 Watershed Restoration Grant Funding for an Amount of $1,557,926 for the Robles Diversion and Fish Passage Design Planning Project, and Authorization for the Auditor-Controller to Process the Necessary Accounting Transactions for Fiscal Year 2022-23;*

Date	Milestone
	Supervisorial District 1, Watershed Protection District 1. This grant from CDFW provides funding for the redesign of the Robles Diversion Facility which is one of six essential downstream infrastructure components of the MDERP. The new design will facilitate natural sediment transport through and/or around the Robles Diversion Facility and enhance volitional fish passage across a wide range of flow conditions. The Robles project builds on the initial work completed as part of Watershed Protection's Robles Working Group process. This item was approved by the Board.
	October 11 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Ratification of the Execution of, the Grant Agreement Between the Ventura County Watershed Protection District and the Wildlife Conservation Board 2021 Wildlife Corridor and Fish Passage Grant Program Funding for an Amount of $1,310,000 for the Camino Cielo Bridge Replacement Design Planning Project; Authorization for the Auditor-Controller to Process the Necessary Accounting Transactions in Road Fund for Fiscal Year 2022-23, and Waive Policy of Not Including Attorney's Fee Provision in County Contracts; Supervisorial District 1, Watershed Protection District 1.* This grant from the WCB provides funding to complete the final design plans, specifications, cost estimates, and associated CEQA updates for a new bridge across the Ventura River near the intersection of Camino Cielo Road and State Highway 33. The Camino Cielo Road Bridge improvement is one of six essential downstream infrastructure components of the MDERP which must be completed before Matilija Dam is removed. This item was approved by the Board.
	October 17 – The Santa Ana Boulevard Bridge Replacement Project successfully concluded with a ribbon cutting ceremony.
	November 1 – Ventura County Board of Supervisors, *Board Letter, Subject: Approval of, and Ratification of the Execution of, the Grant Agreement Between the Ventura County Watershed Protection District and the State Coastal Conservancy for an Amount of $379,350 Grant Funding for the Robles Diversion and Fish Passage Design Planning Project; Supervisorial District 1, Watershed Protection District 1.* This $379,350 grant from the SCC provides funding for the Robles Diversion Project which supplements and will run concurrently with the 2022 CDFW grant for $1,557,926 which was approved by the Board of October 11, 2022. Completion of preliminary design plans for the Robles Diversion Facility improvements will serve as a basis for a physical model to be developed by the USBR for testing and refinement, setting the stage for completion of final design plans and implementation as part of subsequent funding efforts. This item was approved by the Board.

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