

RECLAMATION

Managing Water in the West

Final Environmental Assessment

County of Fresno, Arvin-Edison Water Storage District, Lower Tule River Irrigation District, and Terra Bella River Irrigation District Request for Approvals of Water Transfers to Serve the Millerton New Town Development

EA-12-079



U.S. Department of the Interior
Bureau of Reclamation

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Mission Statements

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Table of Contents

	Page
Section 1 Introduction	1
1.1 Background	1
1.1.1 Millerton New Town Specific Plan Area.....	1
1.1.2 Reclamation's Water Right Permits for the Friant Project.....	3
1.2 Need for the Proposed Action.....	4
Section 2 Alternatives Including the Proposed Action	5
2.1 No Action Alternative.....	5
2.2 Proposed Action.....	5
2.2.1 Interrelated Actions.....	7
2.2.2 Permitting for the Proposed Action	12
2.2.3 Environmental Commitments	12
Section 3 Affected Environment and Environmental Consequences.....	17
3.1 Resources Eliminated from Further Analysis	17
3.2 Air Quality	17
3.2.1 Affected Environment.....	18
3.2.2 Environmental Consequences	18
3.3 Biological Resources	19
3.3.1 Affected Environment.....	19
3.3.2 Environmental Consequences	27
3.4 Cultural Resources	31
3.4.1 Affected Environment.....	32
3.4.2 Environmental Consequences	33
3.5 Global Climate Change.....	34
3.5.1 Affected Environment.....	34
3.5.2 Environmental Consequences	35
3.6 Water Resources	36
3.6.1 Affected Environment.....	36
3.6.2 Environmental Consequences	39
Section 4 Consultation and Coordination.....	41
4.1 Public Review Period.....	41
4.2 Endangered Species Act (16 U.S.C. § 1531 et seq.).....	41
4.3 National Historic Preservation Act (16 U.S.C. § 470 et seq.)	41
4.4 Clean Water Act (33 U.S.C. § 1251 et seq.)	42
Section 5 Preparers and Reviewers	43
Section 6 References	45

Figure 1 County of Fresno’s Current Central Valley Project Contract Service Area.....	2
Figure 2 Existing and Proposed Infrastructure within the MNT Specific Plan Area	6
Figure 3 Proposed Development and Proposed Open Space Areas within MNT	14
Figure 4 Point Millerton and Jamison Ranch Conservation Easement Vicinity Map	15
Table 1 Environmental Protection Measures and Commitments	12
Table 2 Resources Eliminated from Further Analysis	17
Table 3 Annual Estimated Air Quality Emissions During Construction of MNT.....	19
Table 4 Federally Listed Species Potentially Occurring within the Study Area	21
Table 5 Federally Listed Species with the Potential to Occur in the District’s Action Area	26
Table 6 Friant Division Allocations 2005 to 2015.....	36
Appendix A	Millerton Specific Plan Mitigation Measures and Monitoring Program Matrix
Appendix B	Jamison Ranch Conservation Easement Management Plan
Appendix C	Point Millerton Long-Term Management Plan
Appendix D	Wetlands and Open Space Management Plan
Appendix E	Special Status Species Take and Avoidance Measures
Appendix F	U.S. Fish and Wildlife Biological Opinion
Appendix G	National Marine Fisheries Service Concurrence Memo
Appendix H	Cultural Resources Compliance

Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact (FONSI) and Draft Environmental Assessment (EA) between January, 28, 2016 and February 26, 2016. No comments were received. Changes between this Final EA and the Draft EA, which are not minor editorial changes, are indicated by vertical lines in the left margin of this document.

1.1 Background

The County of Fresno (County), a Central Valley Project (CVP) Cross Valley contractor, entered into a water service contract (Contract No. 14-06-200-8292A) with Reclamation in 1976 for 3,000 acre-feet (AF) per year (AFY) of CVP water from the Sacramento-San Joaquin River Delta (Delta) to serve the anticipated foothill developments near Millerton Lake. The County has multiple service areas that provide water for municipal and industrial (M&I) purposes to specific developments within its CVP service area (see lined and hatched areas in Figure 1). At this time, these are the only areas approved to receive CVP water within the County's CVP service area. As the County has approved additional developments within its CVP service area (Millerton New Town [MNT]), the County has requested approval from Reclamation to provide CVP water to all areas within the MNT Specific Plan Area. In addition, the County has negotiated agreements with Arvin-Edison Water Storage District (Arvin-Edison), Terra Bella Irrigation District (Terra Bella), and Lower Tule River Irrigation District (Lower Tule) for long-term transfers to serve MNT. Arvin-Edison, Terra Bella, and Lower Tule have also requested approval from Reclamation for their respective long-term transfers to the County.

1.1.1 Millerton New Town Specific Plan Area

The County identified and selected the MNT Specific Plan Area during studies conducted in the early 1980s that were in support of its Sierra Nevada-Sierra Foothills General Plan update. The concept for the location of the new town project in Fresno County was previously contained in the 1960 County General Plan document. The objectives of this early planning process were to identify a suitable site for a new town east of the Friant-Kern Canal (FKC) and between the San Joaquin and Kings Rivers. The Fresno County Board of Supervisors adopted the Sierra Regional Plan on May 4, 1982 which identified the Millerton area as the most feasible location for a new town. The Millerton area was selected as the location for a new town for the following reasons: (1) its place in the pioneer history of Fresno County; (2) the absence of highly productive agricultural lands on the designated new town site; (3) the proximity of the area to existing recreational opportunities and uses at the Millerton Lake State Recreation Area, and in the nearby foothills and mountains; and (4) to limit parcelization of surrounding foothill areas by concentrating growth in a defined area.

In 1984, the County Board of Supervisors certified the MNT Specific Plan Environmental Impact Report (EIR) and adopted the MNT Specific Plan for the development of 820 acres of land on the north and south sides of Millerton Road, two miles east of the community of Friant

(Land Use Associates 1984). The project planned for 3,499 housing units and a variety of commercial uses including a golf course, public facilities and open space. The projected population increase would add between 8,000 and 10,000 people to the MNT area.

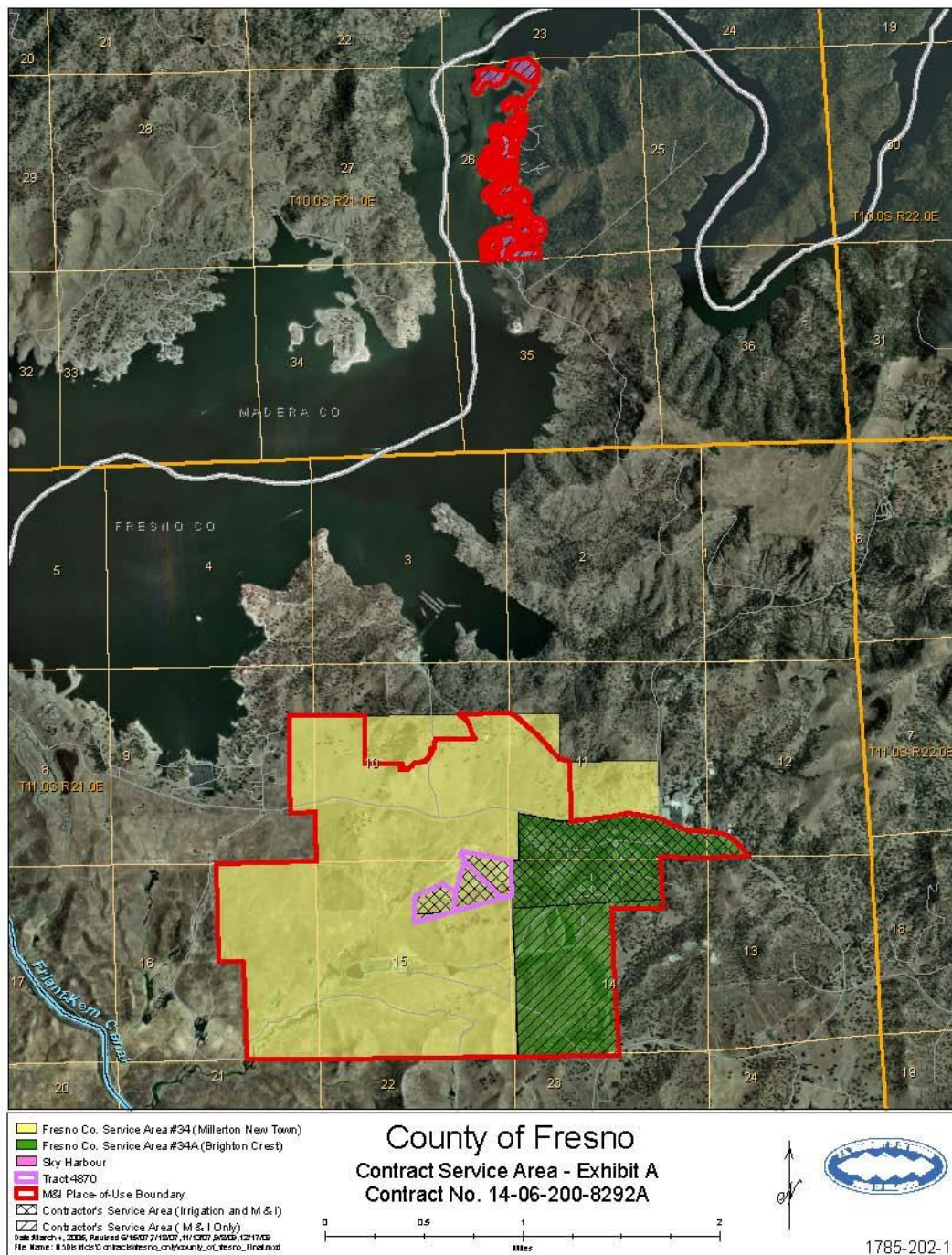


Figure 1 County of Fresno's Current Central Valley Project Contract Service Area

The County's MNT Specific Plan EIR considered the significant effects of both the Brighton Crest area and the MNT project and found that the changes required in the projects would avoid or substantially lessen the significant effects of the projects related to hydrology, drainage and

flooding, energy resources, geology and soils, wastewater disposal, law enforcement and historical/cultural resources. The County also found that the positive social and economic factors associated with these projects override each of the identified unavoidable environmental impacts related to land use and zoning, vegetation and wildlife, climate and air quality, noise, traffic and circulation, solid waste management, fire protection, and schools.

Since the adoption of the MNT Specific Plan EIR, land owners within the MNT planning area (The Clarksfield Company, Inc.; Granville Homes, Inc.; and JPJ, Inc.; MNT proponents) have worked with the County, as well as state and federal agencies, to develop final plans consistent with the requirements of the Specific Plan, as well as state and federal regulations. Two landowners within the Specific Plan Area initiated environmental studies in 1997 in consultation with Reclamation, the Army Corps of Engineers (Corps), the U.S. Fish and Wildlife Service (FWS), and Natural Resources Conservation Service (NRCS).

Between 1997 and 1998, portions of the MNT Specific Plan Area were surveyed for state and federally threatened and endangered plant taxa, waters of the United States, as well as threatened and endangered species including vernal pool fairy shrimp and other listed crustaceans (Jones & Stokes 1997 and 1998, Stebbins 1997a, 1997b). Subsequent to the completion of the 1997 studies, two MNT development proponents used the information generated during the studies to develop a plan to conserve wetlands and endangered species habitat. This work included the development of a detailed draft management plan for protected wetlands and other significant biotic habitats to be preserved in the open space corridor along White Fox Creek. Since 1997, representatives of both landowners have met with staff of Reclamation, the Corps, FWS, California Department of Fish and Wildlife (CDFW¹), Environmental Protection Agency (EPA) and NRCS to discuss natural resource issues and planning options that would meet the regulatory requirements of the resource agencies while remaining consistent with the requirements of the Specific Plan. The MNT development proponents met both formally and informally with Reclamation, CDFW, and FWS staff to discuss elements of a mitigation and monitoring plan for the entire planning area, as well as mitigation, monitoring, and management plans for each individual tract map which was finalized in a County approved matrix. The matrix was revised in 2003, following an update to the delineation of jurisdictional waters for the Specific Plan Area. An addendum to the MNT Specific Plan EIR was approved by the County in 2004. Between 2007 and 2013, the MNT Specific Plan Area was resurveyed extensively for state and federal threatened and endangered plant taxa, waters of the U.S. and threatened and endangered species (H.T. Harvey & Assoc. 2008 & 2009; Vollmar Natural Lands Consulting 2011 & 2012). The portion of MNT addressed in this EA encompasses 1,259 acres total, 777 acres of which is slated for development.

1.1.2 Reclamation's Water Right Permits for the Friant Project

Reclamation holds three water rights permits and one water right license under which it diverts water for the Friant Project at Friant Dam on the San Joaquin River. Only one of Reclamation's three Friant Project water right permits, Permit 11887, authorizes M&I use of water. In 1959, Reclamation petitioned to change the place of use (POU) of all of its Friant Project permits and its license, to add an area around Millerton Lake. The predecessor of the California State Water Resources Control Board (State Board) approved the petition for the license and the two permits

¹ Formerly California Department of Fish and Game (Before 2013)

that do not authorize M&I use, but did not approve the change of POU for Permit 11887. In the early 2000s, Reclamation realized that the underlying San Joaquin River water rights permit that allows them to deliver M&I water supplies to the County did not encompass most of the development area. To rectify this, Reclamation petitioned the State Board for expansion of the POU for M&I supplies to encompass the portions of the MNT where tract maps had already been applied for. Amended State Board Permit 11887, issued January 25, 2007, authorized Reclamation to appropriate water for irrigation, municipal, domestic, and recreational purposes, and designated a POU for such water which included an additional 1,259 acres, including MNT. With this approval, CVP water could be delivered to MNT pending approval by Reclamation of M&I deliveries to additional areas within the County's CVP service area.

Meanwhile, development entities within MNT, thinking that after the lengthy planning process were clear to progress with development, graded Tract 4870; however, although Tract 4870 was approved by the County, only the adjacent Brighton Crest development was approved for delivery of CVP M&I water supplies under the County's CVP contract. Consequently, the County requested that Reclamation approve the expansion of its M&I service area boundaries to include Tract 4870. Reclamation prepared an EA entitled *County of Fresno Service Area Boundary Change to Include Tract #4870 within Millerton New Town* (EA-07-132) that analyzed the change in the County's service area boundary to allow delivery of M&I supplies within Tract 4870 but did not include the entire MNT Specific Plan Area. On March 9, 2009, Reclamation finalized EA-07-132 and issued a FONSI for Tract 4870 after receiving a biological opinion from the FWS (Reclamation 2009). FONSI/EA-07-132 is hereby incorporated by reference.

1.2 Need for the Proposed Action

The County needs approval from Reclamation to deliver M&I supplies within the rest of the MNT Specific Plan Area in order to meet the needs of the County-approved development. Arvin-Edison, Terra Bella, and Lower Tule need approval from Reclamation to execute their respective long-term transfers to the County for delivery to MNT.

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve the delivery of CVP M&I water supplies within the County's service area beyond those already approved. The development would need to acquire additional (non-CVP) water supplies that do not rely on Reclamation approval for delivery within the County's service area. If the non-CVP water supplies require conveyance and/or storage within Reclamation facilities, additional environmental review and approval from Reclamation would be needed.

2.2 Proposed Action

Under the Proposed Action, Reclamation would approve the delivery of CVP M&I supplies to additional areas within the County's service area as shown in Figure 1. In addition, Reclamation would approve three long-term water transfers (through February 28, 2025 with concurrent 9 year renewals after applicable environmental review) to the County from Arvin-Edison, Terra Bella, and Lower Tule as described below.

Pursuant to an agreement between Arvin-Edison and the County, Arvin-Edison would annually transfer to the County up to 1,520 AF of its Friant Division CVP water supply consistent with Arvin-Edison's 9(d) Repayment Contract. Pursuant to a separate agreement between Terra Bella and the County, Terra Bella would transfer 770 AFY of Terra Bella's Friant Division CVP water supply to the County, consistent with the term of Terra Bella's 9(d) Repayment Contract. Should Arvin-Edison be unable to deliver its' transferred water in any given year, Lower Tule would have the option to transfer 1,520 AFY of their Friant Division CVP water supply to the County as a back-up supply. However, the cumulative total of transferred water to the County would not exceed 2,290 AFY and would be drawn by the County through existing infrastructure at Millerton Lake (see Figure 2).

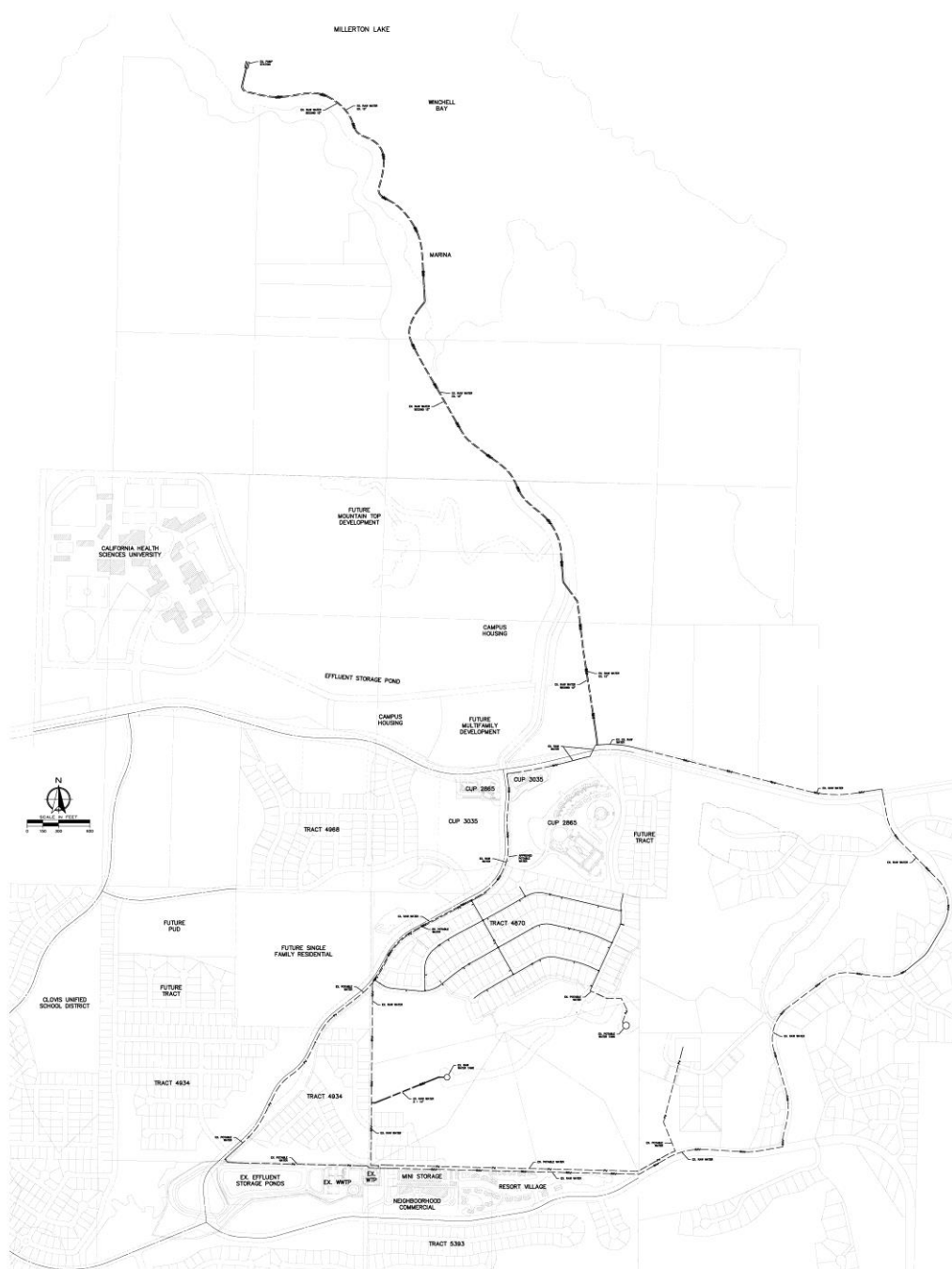


Figure 2 Existing and Proposed Infrastructure within the MNT Specific Plan Area

2.2.1 Interrelated Actions

Reclamation does not have land use change approval authority. The County is the land use authority who decides what development is appropriate in Fresno County. As such, the County approved the construction of the development and impacts relating to the development were analyzed separately by the County under a certified Final EIR as described in Section 1.1. Reclamation's federal action is the approval of three long-term CVP transfers to the County as well as authorization for the County to deliver CVP water to additional areas within its' CVP Service area in accordance with the County's decisions; however, Reclamation's Proposed Action has a series of interrelated actions. These include the construction of the remainder of the County-approved MNT development, the implementation of avoidance and minimization measures for listed species and critical habitat (see Table 1), implementation of the MNT Wetlands and Open Space Management Plan, contributions to the MNT Open Space Preserve, and implementation of the Jamison Ranch Conservation Easement and enlargement of the Point Millerton Conservation Area.

Construction of Millerton New Town

As described previously, the County-approved MNT development is designed to accommodate a population of 8,000 to 10,000 (Land Use Associates 1984, County 2004). It incorporates the necessary housing for single and multi-families, commercial and public facilities, a private health sciences university, recreation areas, and open space to provide for community residents. Development is planned to be done in phases over an extended period. All development within the MNT Specific Plan Area must comply with the terms of the Millerton Specific Plan and Millerton Specific Plan Mitigation Measures and Monitoring Program Matrix (Appendix A) as approved by the County.

The proposed MNT development comprises 1,273 acres of which approximately 494 acres will remain as undeveloped open space (see Figure 3). Proposed construction within the remaining 779 acres includes the following (see Figure 2):

- 1,850 single family residential lots and 169 multi-family residential units (approx. 360 acres and 13 acres, respectively).
- Modification or construction of 175 acres of roadways including: Millerton Road (11.5 acres), Marina Drive (14.0 acres), Saubrice Drive (11.6 acres), Winchell Cove Drive (4.2 acres), Lake Ridge Drive (1.7 acres), Sunset Drive (1.7 acres), Brighton Road (2.1 acres), Foothill Drive/Arroyo Road (6.8 acres), and local residential roads (121.3 acres).
- Storm water basins (approximately 27 acres).
- Effluent storage ponds (approximately 28 acres).
- Infrastructure including: sewer lift stations and force mains, water storage tank(s) with service road, reclaimed water distribution piping, wet and dry utilities, expansion of existing water treatment plant capacity, and expansion of existing wastewater treatment plant capacity.
- Propane storage areas.
- Clovis Unified School Campus (20.3 acres).
- California Health Science University Campus (approximately 179 acres, some acreage also listed under roads, and open space acreage; phased construction over a 15-20 year period) including: administration building, student housing, classrooms/academic facilities, food

service, student center, library, walks and gathering areas, parking, other campus support, and athletic fields.

- Government Center including a library, fire station and satellite sheriff station (3 acres)
- Hotel and Conference Center (16 acres).
- Gas Station/mini mart and Retail, Business Professional Center (15 acres).
- Mini storage and Neighborhood Commercial (5 acres).
- Resort village (6.5 acres).

The elements of the proposed 483 acres of open space would include the following elements (discussed in the Implementation of the Wetlands and Open Space Management Plan for MNT Section, below):

- White Fox Creek Parkway (89 acres).
- Other Natural Open Space (107 acres).
- Tertiary Treated Effluent Spray Disposal Area (totaling 292 acres) Including:
 - Naturalistic Spray Area (at least 96 acres),
 - Community Parks (at least 32.2 acres),
 - Cultivated Open Space (up to 163.8 acres), and
 - Memorial Park (7 acres).
- Walks and Trails.

Waste Water Disposal All tertiary treated effluent from the wastewater treatment plant would be used to irrigate agricultural fields/vineyards, campus landscaping, roadway plantings, common areas, commercial area landscaping, restoration plantings, and naturalistic spray disposal areas within the MNT Specific Plan Area, as described below in the description of the MNT Wetlands and Open Space Management Plan.

Spray disposal will comply with all Federal, State, and Local laws, and will not result in discharge into any waters of the U.S. Spray disposal will allow water to evaporate, be transpired by irrigated plants in the spray area, or percolate into the soil. Any groundwater infiltration will not result in increased off-site flow from White Fox Creek.

Discharge of waste water to surface waters or surface water drainage courses will be prohibited. Application of treated waste water in a manner or location other than that described above will be prohibited. Effluent will not be applied to any permanent wetland areas that would result in surface water drainage.

Waste Disposal and Storage for University Campus and Other Facilities All chemical wastes, whether liquid or solid, generated by research associated with the California Health Sciences University will be handled, stored and disposed in compliance with federal and state regulations. All university personnel involved with research will be trained in the proper handling, storage and disposal of waste materials.

Liquid chemical waste will be stored in approved containers within locked storage facilities. Liquid chemical waste will be picked up and disposed of only by companies licensed and

authorized to handle liquid chemical waste. No liquid chemical waste that would harm humans or the environment will be disposed of in the waste water system.

Solid chemical and other waste will be stored in approved containers within locked storage facilities. Solid waste will be picked up and disposed of only by companies licensed and authorized to handle such waste. No solid waste that would harm humans or the environment will be disposed of in the waste water system or non-controlled solid waste disposal.

All researchers and laboratory workers will adhere to campus policies and procedures in the conduct of their research. A Biohazard Safety Officer and committee will oversee the policies and procedures to assure compliance with Federal and State regulations.

Containment and hazardous waste handling procedures for the Gas Station/Mini Mart would be subject to state permitting and regulation. Procedures for spill prevention and hazardous waste handling would be implemented per all applicable state and local regulations.

Erosion Control and Water Quality Protection An erosion control plan shall be implemented as required by the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area (Appendix A). Such a plan would also be a required component of a General Construction Permit that must be obtained from the Regional Water Quality Control Board (Water Board), Central Valley Region. The revegetation of exposed slopes would be one component of the erosion control plan. Plant species appropriate for erosion control include both the non-native grasses that currently dominate the site as well as selected native species that quickly become established, and whose roots bind the soil. Non-native species being considered for the MNT Specific Plan Area include soft chess (*Bromus hordeaceus*), wild oats (*Avena fatua*), and Italian ryegrass (*Festuca perennis*). Native species being considered for the MNT Specific Plan Area include creeping wildrye (*Leymus triticoides*), California brome (*Bromus carinatus*), California fescue (*Festuca californica*), and meadow barley (*Hordeum brachyantherum*). Other non-native and native species may also be considered. During construction, measures will be taken to control runoff from construction sites, as required in the Millerton Specific Plan. Filter fabric fences, heavy plastic earth covers, gravel berms, or lines of straw bales are a few of the techniques that may be used. Sediment traps with monofilament netting would not be used to avoid ensnaring California tiger salamander. Grading will be phased so that prompt revegetation can control erosion. Where possible, only those areas which will later be resurfaced, landscaped, or built on will be disturbed. Surfacing of parking lots and roadways will take place as soon as practicable.

The development of the MNT Specific Plan Area provides for an open space corridor along White Fox Creek. Should tributary wetland swales be temporarily impacted as a result of installing infrastructure to connect the tract with the existing wastewater treatment plant, the activities would fully comply with the provisions of the Corps Nationwide Permit No. 29 that applies to residential developments or a Corps Individual Permit, whichever is approved by the Corps. Furthermore, should wetlands be temporarily affected, a Water Quality Certification from the Water Board covering those activities shall be obtained in compliance with Section 401 of the Clean Water Act. Drainage of the MNT Specific Plan Area will be designed to utilize natural drainage courses. Runoff will flow to surface collectors and storm drains and into a

series of basins where sediment will settle-out and the flows entering the natural drainage system can be regulated. Off-site flows will not exceed pre-development levels.

The development has incorporated on-site (483 acres of open space) and off-site conservation measures as part of the Proposed Action in order to minimize impacts from construction of the project. The sites proposed for off-site conservation measures is the 2,269-acre Jamison Ranch and the 200 acre Point Millerton Conservation Area (Figure 4). These Conservation Measures are included in the mitigation and monitoring matrix approved by the County (Appendix A).

Jamison Ranch Conservation Easement

The Jamison Ranch Conservation Easement (Figure 4) is an approximately 2,269 acre area in the foothills of the Sierra Nevada that will be implemented as part of the Proposed Action to conserve habitat for the federally listed California tiger salamander and vernal pool fairy shrimp. The Jamison Ranch Conservation Easement was selected as a proposed off-site mitigation area due to its proximity to the MNT Specific Plan Area, proximity to other preserves, history of good land management practices, similarity of habitat, presence of special-status species, and its inclusion in both California tiger salamander critical habitat and vernal pool core recovery areas. A conceptual management and monitoring plan has been developed for the Jamison Ranch Conservation Easement to maximize the long-term contribution to recovery efforts for plants and animals dependent on vernal pool and wetland ecosystems (Appendix B). The plan incorporates conservation measures, including permanent habitat protection and management.

Point Millerton Conservation Area Enlargement

The Point Millerton Conservation Area is a 200-acre Conservation Easement on a Ranch bordering the north shore of Millerton Lake (Figure 4). The Conservation Area was established for the protection of California tiger salamander. As part of the Proposed Action, an additional 531 acres of the Point Millerton Ranch will be placed under Conservation Easement, enlarging the Conservation Area to 731 acres. The Point Millerton Ranch was selected due to its proximity to the MNT Specific Plan Area, adjacency to preserved and public areas to the east, south, and west, presence of multiple California tiger salamander breeding ponds, and the fact that 200 acres of the ranch is already under conservation easement. The additional area (531 acres) would be managed and monitored according to the existing long-term management plan for the Ranch (Appendix C).

Contributions to the Millerton New Town Open Space Preserve

The Millerton Open Space and Natural Resource Plan was developed to meet the requirements of Measure 16.f of the Millerton Specific Plan Mitigation Measures and Monitoring Program Matrix (see Appendix A). Measures 16.g and 16.h require that each development of the MNT Specific Plan Area be part of an open space district, and that mitigation fees be collected for the acquisition and preservation of open space parcels with consistent features. These conservation measures have been implemented for Tract 4870 but shall be further implemented as part of this Proposed Action. The White Fox open space corridor extends from the northeast corner of the MNT to the southwest corner of the project as shown in Figure 3.

Implementation of the Wetlands and Open Space Management Plan

As part of the Proposed Action, a Wetlands and Open Space Management Plan would be implemented for portions of the open space within the MNT Specific Plan Area (see Appendix D). The Wetlands and Open Space Management Plan provides methods for restoring and maintaining the different types of open space in the MNT, and requires regular monitoring, management, and reporting. The types of open space allowed in the Wetlands and Open Space Management Plan include:

- White Fox Creek Corridor.
- Natural Open Space.
- Naturalistic Spray Areas.
- Parks.
- Cultivated Open Space.

The Wetlands and Open Space Management Plan provides for restoration of the White Fox Creek Corridor to a closed-canopy riparian scrub/forest habitat. This will be accomplished by plantings, irrigation, weed control and herbivory prevention, and monitoring with regular maintenance in perpetuity.

The Natural Open Space in the MNT Specific Plan Area (outside of the White Fox Creek Corridor) will be subject to managed grazing and/or mowing for the benefit of native upland and vernal pool species, and will be monitored and managed in perpetuity for the benefit of those species.

The Naturalistic Spray Areas will be subject to irrigation with tertiary treated effluent. They will be managed with grazing and/or mowing, and may be restored via planting and management of native species in order to enhance grassland and oak woodland habitat within the MNT Specific Plan Area. These areas may also include trails and benches, but will not include non-native landscaping or other high-intensity uses. These areas will be subject to regular monitoring and management to ensure that they provide a combination of biological and community values in perpetuity.

Parks in the MNT Specific Plan Area will include lawns, ball fields, memorials/cemetery, landscape plantings, and other similar features. Agricultural areas within the MNT Specific Plan Area will be planted with vineyards, row crops, or orchard crops, and managed for agricultural production and community health and scenic/cultural values.

Approximately 89 acres of the MNT Specific Plan Area will be within the White Fox Creek Corridor, 102 acres will be Natural Open Space (outside the White Fox Creek Corridor), 96 acres will be Naturalistic Spray Area, 32 acres will be parks, and 164 acres will be other spray disposal area. The 164 acres of other spray disposal area may be managed as some combination of Naturalistic Spray Area, Parks, or Agricultural Areas; it will not be subdivided and developed into residential, commercial, or public uses.

For a full description of the restoration, maintenance, management, and monitoring of the open space within the MNT Specific Plan Area, see Appendix D.

2.2.2 Permitting for the Proposed Action

The following permits will be obtained by the proponents for the MNT Development:

- General Construction Permit from the Water Board, Central Valley Region.
- Clean Water Act Section 404 permit(s) from the Corps.
- Clean Water Act Section 401 Water Quality Certification from the Regional Water Quality Control Board.
- Waste Discharge Requirements from the Regional Water Quality Control Board.

Copies of all permits shall be provided to Reclamation.

2.2.3 Environmental Commitments

Reclamation, the County, project proponents, Arvin-Edison, Lower Tule, and Terra Bella shall implement the following environmental protection measures, where applicable, to avoid and/or reduce potential environmental impacts associated with the Proposed Action (Table 1).

Environmental consequences for resource areas assume the measures specified would be fully implemented. Copies of all reports shall be submitted to Reclamation.

Table 1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Air Quality	Each project within the MNT Specific Plan Area shall complete an Air Quality Impact Assessment under the guidelines of the San Joaquin Valley Air Pollution Control District as specified in the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area (Appendix A).
Air Quality	A dust control plan will be implemented during construction to reduce fugitive dust pursuant to San Joaquin Valley Air Pollution Control District requirements.
Biological Resources	A Wetland and Open Space Mitigation and Management Plan and Monitoring Program shall be implemented as specified in the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area (Appendix A).
Biological Resources	Take and avoidance measures will be implemented as part of the Proposed Action. These measures are included in Appendix E.
Biological Resources	A Final Jamison Ranch Conservation Easement Management Plan that is consistent with the conceptual management plan included as Appendix B of this EA shall be submitted to Reclamation for review and approval prior to the start of construction.
Biological Resources	Reclamation and the proponents shall comply with all terms and conditions of the biological opinion included in Appendix F.
Cultural Resources	In the event of an inadvertent cultural resource discovery, Reclamation must follow the Post Review Discovery portion of the regulations at 36 CFR 800.13. Although very unlikely, if human remains are identified on Reclamation lands during implementation of this action, the project shall be halted immediately and the Reclamation Mid-Pacific Regional Archaeologist contacted immediately to discuss how to proceed under the Native American Graves Protection and Repatriation Act, if applicable.
Cultural Resources	All stipulations will be followed as stated in the Section 106 consultation efforts for the Millerton New Town Development Project (Appendix H)
Drainage	A Drainage Plan shall be developed and implemented as specified in the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area (Appendix A).
Drainage	Drainage of the MNT Specific Plan Area will be designed to utilize natural drainage courses. Runoff will flow to surface collectors and storm drains and onto a series of basins where sediment will settle-out and the flows entering the natural drainage system can be regulated. Off-site flows will not exceed pre-development levels.

Resource	Protection Measure
Hazardous Materials/ Hazardous Waste	All chemical wastes, whether liquid or solid, generated by research associated with the California Health Sciences University would be handled, stored and disposed in compliance with Federal and State regulations. All university personnel involved with research would be trained in the proper handling, storage and disposal of waste materials.
Hazardous Materials/ Hazardous Waste	Liquid chemical waste would be stored in approved containers within locked storage facilities. Liquid chemical waste would be picked up and disposed of only by companies licensed and authorized to handle liquid chemical waste. No liquid chemical waste that would harm humans or the environment would be disposed of in the waste water system.
Hazardous Materials/ Hazardous Waste	Solid chemical and other waste would be stored in approved containers within locked storage facilities. Solid waste would be picked up and disposed of only by companies licensed and authorized to handle such waste. No solid waste that would harm humans or the environment would be disposed of in the waste water system or non-controlled solid waste disposal.
Hazardous Materials/ Hazardous Waste	All researchers and laboratory workers would adhere to campus policies and procedures in the conduct of their research. A Biohazard Safety Officer and committee would oversee the policies and procedures to assure compliance with Federal and State regulations.
Hazardous Materials/ Hazardous Waste	Containment and hazardous waste handling procedures for the Gas Station/Mini Mart would be subject to state permitting and regulation. Procedures for spill prevention and hazardous waste handling would be implemented per all applicable state and local regulations.
Noise	Construction hours of operation will occur between 6 a.m. and 9 p.m. on weekdays and 7 a.m. and 5 p.m. Saturday and Sunday pursuant to the Fresno County Noise Ordinance.
Water Resources	An effluent monitoring program will be implemented as required by the Regional Water Quality Control Board and specified in the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area (Appendix A).
Water Resources	Spray disposal of waste water would comply with all Federal, State, and Local laws, and would not result in discharge into any waters of the U.S. Spray disposal would allow water to evaporate, be transpired by irrigated plants in the spray area, or percolate into the soil. Any groundwater infiltration would not result in increased off-site flow to White Fox Creek.
Water Resources	Discharge of waste water to surface waters or surface water drainage courses would be prohibited. Application of treated waste water in a manner or location other than that described above would be prohibited. Effluent would not be applied to any permanent wetland areas that would result in surface water drainage.
Various Resources	An erosion control plan shall be implemented as required by the Mitigation Measures and Monitoring Program Matrix for the Millerton Specific Plan Area (Appendix A).

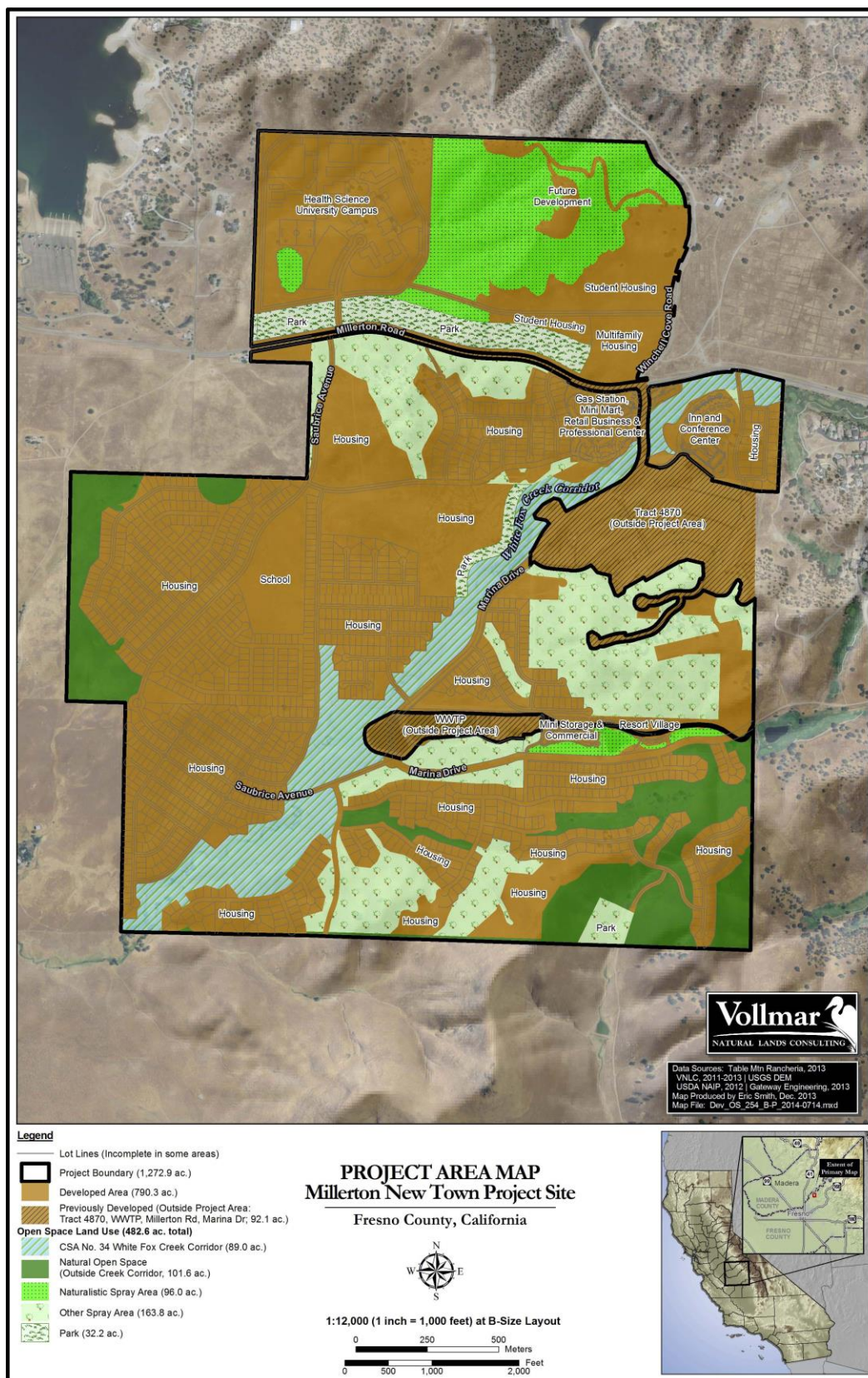


Figure 3 Proposed Development and Proposed Open Space Areas within Millerton New Town

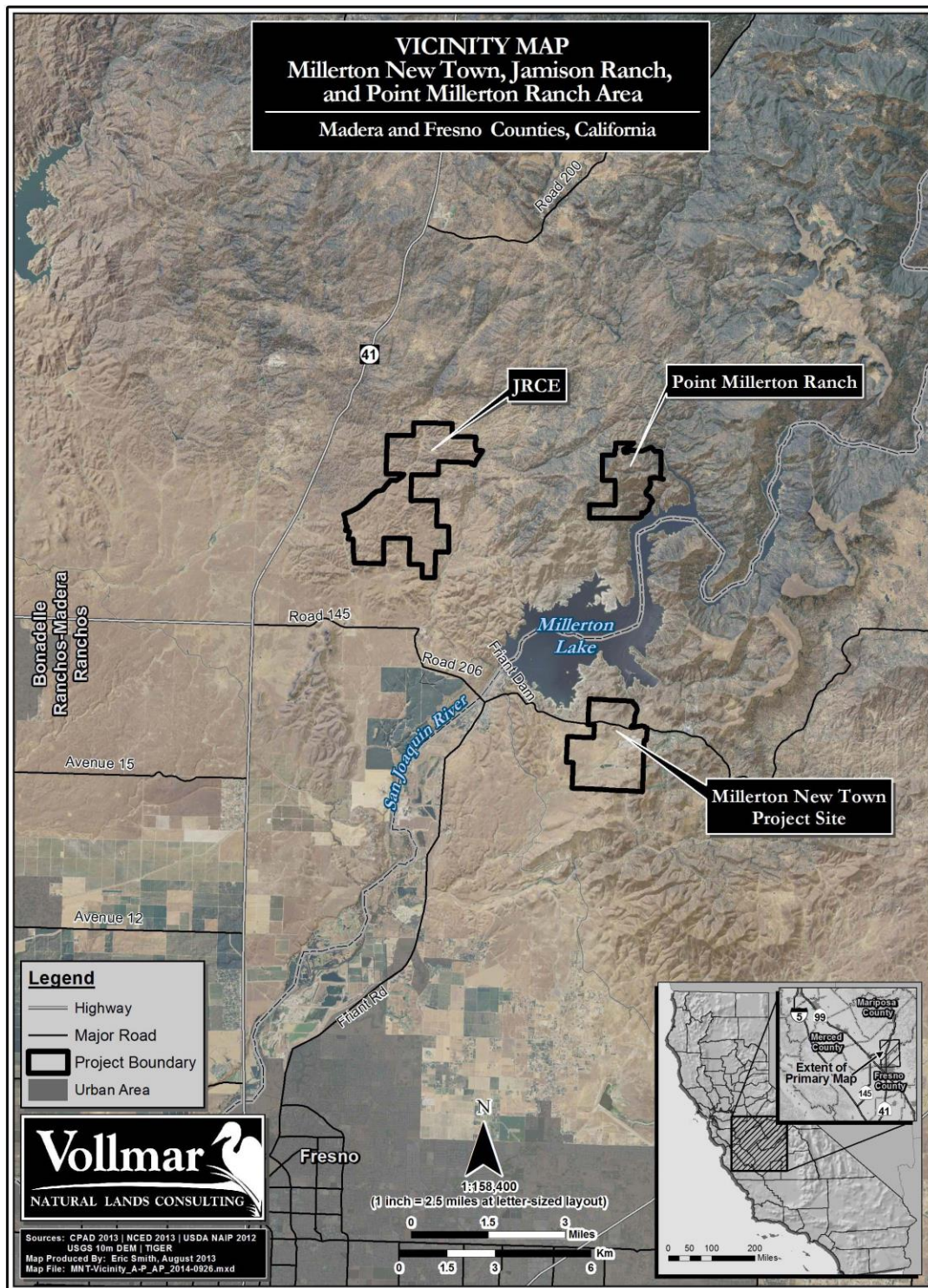


Figure 4 Point Millerton and Jamison Ranch Conservation Easement Vicinity Map

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Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that the Proposed Action did not have the potential to cause direct, indirect, or cumulative adverse effects to the resources listed in Table 2.

Table 2 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Indian Sacred Sites	The Proposed Action would not limit access to ceremonial use of Indian Sacred Sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites. Therefore, there would be no impacts to Indian Sacred Sites as a result of the Proposed Action.
Indian Trust Assets	The Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area.
Socioeconomics	The Proposed Action would have beneficial impacts on socioeconomic resources within Fresno County as their available CVP water supplies would be used to support housing for an economically diverse community.
Environmental Justice	The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease nor would it disproportionately impact economically disadvantaged or minority populations.
Land Use	The Proposed Action allows a transfer of water. All land use changes have been authorized through the County.

3.2 Air Quality

Section 176 (C) of the Clean Air Act (42 U.S.C. 7506 (C)) requires any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan required under Section 110 (a) of the federal Clean Air Act (42 U.S.C. 7401 [a]) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with State Implementation Plan's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing

the conformity requirements would, in fact conform to the applicable State Implementation Plan before the action is taken.

On November 30, 1993, the EPA promulgated final general conformity regulations at 40 CFR 93 Subpart B for all federal activities except those covered under transportation conformity. The general conformity regulations apply to a proposed federal action in a non-attainment or maintenance area if the total of direct and indirect emissions of the relevant criteria pollutants and precursor pollutant caused by the Proposed Action equal or exceed certain *de minimis* amounts thus requiring the federal agency to make a determination of general conformity.

3.2.1 Affected Environment

The Proposed Action area lies within the San Joaquin Valley Air Basin under the jurisdiction of the San Joaquin Valley Air Pollution Control District (Air District). The pollutants of greatest concern in the San Joaquin Valley are carbon monoxide (CO), ozone, ozone precursors such as reactive organic gases (ROG) or volatile organic compounds (VOC), inhalable particulate matter between 2.5 and 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}). The San Joaquin Valley Air Basin has reached Federal and State attainment status for CO, nitrogen dioxide, and sulfur dioxide. Although Federal attainment status has been reached for PM₁₀ the State standard has not been met and both are in non-attainment for ozone and PM_{2.5} (San Joaquin Valley Air Pollution Control District 2014). There are no established standards for nitrogen oxides (NO_x); however, they do contribute to nitrogen dioxide standards and ozone precursors (San Joaquin Valley Air Pollution Control District 2014).

3.2.2 Environmental Consequences

No Action

There would be no impact to air quality as current conditions would remain the same.

Proposed Action

Water for the proposed transfers would be delivered through existing infrastructure directly from Millerton Lake to the development. No expansion of the pumping facilities would be required to deliver this water to the development and pumping would fall under the requirements of existing air quality permits from the Air District for use of these pumps. Any exceedances would be reviewed by the Air District and mitigated by the project proponents to ensure air quality impacts are minimized.

Air quality impacts due to construction and operational activities related to MNT and its planned uses were analyzed and mitigated in the MNT Specific Plan Environmental Impact Report (EIR) (Land Use Associates 1984). As shown in Table 3 annual criteria pollutant emissions for construction of MNT do not exceed the Air District's *de minimis* thresholds; however, emissions at full buildout of the development exceed the thresholds for reactive organic gasses (ROG), carbon monoxide (CO), nitrogen oxides (NO_x), and inhalable particulate matter between 2.5 and 10 microns in diameter (PM₁₀). The MNT EIR reported air quality impacts were deemed substantially adverse. As described in Table 1 and included in the Mitigation Measures and Monitoring Program Matrix (Appendix A), air quality impacts resulting from the MNT development will be minimized by environmental commitments as approved by the Air District.

Any air quality exceedances would be reviewed by the Air District and mitigated by the project proponents to ensure air quality impacts are minimized.

Table 3 Annual Estimated Air Quality Emissions During Construction of MNT

	Criteria Emissions (tons/year)					
	ROG	CO	NO _x	SO ₂	PM ₁₀	PM _{2.5}
Phase 1	1.43	5.14	1.50	0.01	0.58	0.10
<i>San Joaquin Valley Air Pollution Control District Threshold</i>	10	100	10	27	15	15
<i>Exceed Thresholds?</i>	NO	NO	NO	NO	NO	NO
Project Build-out	30.6	114.0	20.6	0.3	19.2	9.9
<i>San Joaquin Valley Air Pollution Control District Threshold</i>	10	100	10	27	15	15
<i>Exceed Thresholds?</i>	YES	YES	YES	NO	YES	NO

Cumulative Impacts

The majority of the installation and operation emissions for the Proposed Action are well below the *de minimis* thresholds established by the Air District but ROG, CO, NO_x, and PM₁₀ emissions would exceed the Air District's thresholds of significance at full built-out. The proponent will work with the Air District to mitigate these impacts in order to offset emissions as described above.

3.3 Biological Resources

3.3.1 Affected Environment

The Action Area encompasses all or portions of the following: 1) lands proposed for development within the MNT Specific Plan Area, including all supporting infrastructure, 2) proposed open space areas within the MNT Specific Plan Area, including White Fox Creek, 3) the Jamison Ranch and Point Millerton Conservation Easements, and 4) the water districts proposing to transfer water to the County.

Millerton New Town Specific Plan Area

Numerous plant communities occur within, and in the vicinity of, the MNT Specific Plan Area located in the Sierra Nevada foothill region of Fresno County, including non-native grassland, blue oak woodland, valley mixed riparian, hardpan vernal pool and seasonal wetland swales, freshwater seeps, and stock ponds. Agricultural production, livestock grazing, and residential development also occur, although the majority of the land remains annual grassland and blue oak woodland used for primarily for livestock production.

Three seasonal drainages, including White Fox Creek and two tributary drainages, pass through lands in the MNT Specific Plan Area. Flows in these drainages are continuous for weeks possibly up to months at a time during wet winters, but are dry, or support scattered ponded areas, during summer and fall. White Fox Creek intermittently flows 1.8 miles through the MNT Specific Plan Area (Figure 3) and continues another 4.3 miles before it converges with Little Dry Creek. Approximately two miles downstream of this point, Little Dry Creek converges with the San Joaquin River. Thus, 6.4 miles of intermittent creek channel separates the MNT Specific Plan Area from the San Joaquin River. Under normal conditions, little or no surface connection between White Fox Creek and the San Joaquin River exists.

Jamison Ranch

Numerous plant communities occur within, and in the vicinity of, the Jamison Ranch Conservation Easement in the Sierra Nevada foothill region of Madera County, including blue oak woodland, non-native grassland, vernal pool/vernal pool swale complexes, wetland channel/seep/swale, riparian woodland, and stock ponds (VNLC 2011). Agricultural production, livestock grazing, and low density residential development occur in the vicinity of the Jamison Ranch Conservation Easement, although the majority of the land remains annual grassland and blue oak woodland used for livestock production.

Cottonwood Creek flows across the northern and eastern portions of the site for approximately 2.3 stream-miles. Two ephemeral tributaries join Cottonwood Creek within the Jamison Ranch Conservation Easement. Cottonwood Creek itself is tributary to the San Joaquin River, joining it approximately 3.5 stream-miles below the Jamison Ranch Conservation Easement, just downstream of the Friant Dam, and upstream of the confluence of Little Dry Creek and the San Joaquin River. Cottonwood Creek flows seasonally in the winter months. In the summer, surface flow ceases, but perennial stream pools remain. Under normal conditions, little or no surface connection between White Fox Creek and the San Joaquin River exists.

Point Millerton Conservation Area

Habitats within the Point Millerton Conservation Area include blue oak woodland, annual grassland, scrub, stock ponds, seasonal wetlands, and ephemeral drainages. Agricultural production, livestock grazing, and low density residential development occur in the vicinity of the Point Millerton Conservation Area, although the majority of the land remains annual grassland and blue oak woodland used for livestock production.

No named streams flow through the Point Millerton Conservation Area; however multiple ephemeral drainages drain the slopes, and flow eventually to Millerton Lake. The already-preserved portion of the conservation area borders Millerton Lake for a small portion of its boundary.

Table 4 was prepared using an official species list obtained from the FWS on January 8, 2014 (Document No. 140108032541) and a query of the California Natural Diversity Database (CNDDDB), comprising all of the U.S. Geological Survey 7½ minute quadrangles that overlie all, or portions of, the MNT Specific Plan Area, the Jamison Ranch Conservation Easement, and the Point Millerton Conservation Area (CNDDDB 2015).

Table 4 Federally Listed Species Potentially Occurring within the Study Area

Species	Status ¹	Effects ²	Occurrence in the Study Area ³
INVERTEBRATES			
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	E	NLAA	<p>MNT Specific Plan Area: Unlikely. Large, long-lasting vernal pool habitat required by this species is absent from the MNT Specific Plan Area, and protocol-level wet season surveys (Jones & Stokes 1998, VNLC 2013a, VNLC 2014) did not detect this species within suitable habitat within the MNT Specific Plan Area.</p> <p>Jamison Ranch Conservation Easement: Unlikely. Large, long-lasting vernal pool habitat required by this species is absent from the Jamison Ranch Conservation Easement, and wet season surveys (VNLC 2012, VNLC 2016) did not detect this species within the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>
Longhorn fairy shrimp <i>Branchinecta longiantenna</i>	E	NLAA	<p>MNT Specific Plan Area: Unlikely. This species has a very limited distribution, with the nearest occurrence locality being the Kesterson National Wildlife Refuge, approximately 68 miles west-northwest of the MNT Specific Plan Area. Protocol-level wet season surveys (Jones & Stokes 1998, VNLC 2013a, VNLC 2014) did not detect this species within suitable habitat within the MNT Specific Plan Area.</p> <p>Jamison Ranch Conservation Easement: Unlikely. This species has a very limited distribution, with the nearest occurrence locality being the Kesterson National Wildlife Refuge, approximately 50 mi west of the Jamison Ranch Conservation Easement. Wet season surveys (Jones & Stokes 1998, VNLC 2013a, VNLC 2014) did not detect this species within the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T	NLAA	<p>MNT Specific Plan Area: Possible. Elderberry host plants are present within the MNT Specific Plan Area. Exit holes were not observed during surveys in April 2013 (Reclamation 2013a).</p> <p>Jamison Ranch Conservation Easement: Unlikely. No elderberry plants were observed on the Jamison Ranch Conservation Easement, though surveys have not been conducted.</p> <p>Point Millerton Conservation Area: Possible. Elderberry host plants are present along seasonal drainages, but have not been surveyed for exit holes.</p>

Species	Status ¹	Effects ²	Occurrence in the Study Area ³
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T, X	MAA	<p>MNT Specific Plan Area: Present. Surveys of vernal pool habitat within in the MNT Specific Plan Area detected this species throughout multiple years, including the most recent surveys in 2013(Reclamation 2013a).</p> <p>Jamison Ranch Conservation Easement: Present. Surveys of vernal pool habitat within the Jamison Ranch Conservation Easement detected this species (VNLC 2011a).</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	E	NLAA	<p>MNT Specific Plan Area: Unlikely. Protocol-level wet and dry season surveys (Jones & Stokes 1997, HBC 2012) did not detect this species in suitable habitat within the MNT Specific Plan Area.</p> <p>Jamison Ranch Conservation Easement: Unlikely. Most pools on site do not pond long enough to support this species.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>
FISH			
Central Valley spring-run chinook salmon <i>Oncorhynchus tshawytscha</i>	T	NLAA	<p>MNT Specific Plan Area: Possible. The MNT Specific Plan Area is outside the current range of this species. However, habitat conditions have, and will continue to improve in the San Joaquin River and its upper tributaries due to restoration activities from the SJRRP. This program, and the introduction of an experimental nonessential population, indicates that this species may soon ascend the San Joaquin River, and during years with high precipitation, potentially access tributary drainages such as Little Dry Creek at some point in the near future.</p> <p>Jamison Ranch Conservation Easement: Possible The Jamison Ranch Conservation Easement is outside the current range of this species. However, Cottonwood Creek runs through Jamison Ranch Conservation Easement and is a tributary of the San Joaquin River, which may provide access to this species during high flood years.</p> <p>Point Millerton Conservation Area: Absent. No streams with sufficient duration to support this species occur on the site.</p>

Species	Status ¹	Effects ²	Occurrence in the Study Area ³
Central Valley steelhead <i>Oncorhynchus mykiss</i>	T	NLAA	<p>MNT Specific Plan Area: Possible. The MNT Specific Plan Area is outside the current range of this species. However, habitat conditions have, and will continue to improve in the San Joaquin River and its upper tributaries due to restoration activities from the SJRRP. No reintroduction program has been initiated for this species, but improved habitat conditions increase the likelihood of migration of Central Valley steelhead into the San Joaquin River above the Merced River and during years with high precipitation, the species could potentially access tributary drainages such as Little Dry Creek.</p> <p>Jamison Ranch Conservation Easement: Possible The Jamison Ranch Conservation Easement is outside the current range of this species. However, Cottonwood Creek runs through Jamison Ranch Conservation Easement and is a tributary of the San Joaquin River, which may give the steelhead access during high flood years.</p> <p>Point Millerton Conservation Area: Absent. No streams with sufficient duration to support this species occur on the site.</p>
Delta smelt <i>Hypomesus transpacificus</i>	T	NE	<p>Study Area: Absent. The Study Area is outside of this species' range. No suitable aquatic habitat for the species is present in the Action Area.</p>
AMPHIBIANS			
California red-legged frog <i>Rana aurora draytonii</i>	T	NE	<p>Study Area: Absent. This species has been locally extirpated from the Study Area.</p>
California tiger salamander <i>Ambystoma californiense</i>	T, X	MAA	<p>MNT Specific Plan Area: Present. Detected during surveys conducted in 1997 (Jones & Stokes, 1997, VNLC 2014). Vernal pool and other potential breeding habitat, as well as upland habitat, is present within the MNT Specific Plan Area.</p> <p>Jamison Ranch Conservation Easement: Present. Larvae detected in breeding habitat during surveys conducted in 2011 (VNLC 2011a, VNLC 2012, VNLC 2013b). Upland habitat is also present throughout the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Present. Stock ponds on the Point Millerton Conservation Area were documented to support California Tiger Salamander breeding in 2008 and 2011 (LOA 2011, VNLC 2011b)</p>
REPTILES			
Blunt-nosed leopard lizard <i>Gambelia sila</i>	E	NE	<p>Study Area: Absent. The Study Area is outside of this species' range.</p>
Giant garter snake <i>Thamnophis gigas</i>	T	NE	<p>Study Area: Absent. The Study Area provides no habitat for this species and lies well outside of its range.</p>

Species	Status ¹	Effects ²	Occurrence in the Study Area ³
MAMMALS			
Fresno kangaroo rat <i>Dipodomys nitratoides exilis</i>	E	NE	Study Area: Absent. The Study Area is outside of this species' range.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	E	NLAA	<p>MNT Specific Plan Area: Unlikely. The MNT Specific Plan Area is at the edge of the species' occupied range, and focused surveys in recent years (LOA, 2003, D. Newman and H. Clark, pers. Comm. with M. Meyer of H. T. Harvey & Assoc., March 2008) have not detected kit foxes.</p> <p>Jamison Ranch Conservation Easement: Unlikely. The species historically occurred to the foothill margin along the east side of the San Joaquin Valley north to La Grange in Stanislaus County (FWS 1998), but Grinnell et al. (1937) believed that by 1930 the range had been reduced by nearly 50% with a majority of the remaining occupied habitat in the western and southwestern San Joaquin Valley.</p> <p>Point Millerton Conservation Area: Unlikely. See above.</p>
PLANTS			
Greene's tuctoria <i>Tuctoria greenei</i>	E	NLAA	<p>MNT Specific Plan Area: Absent. No extant populations of this species are known in Fresno County. This species has not been observed in the MNT Specific Plan Area during previous plant surveys.</p> <p>Jamison Ranch Conservation Easement: Unlikely. Only 1 occurrence (CNDDDB, 2013), which is possibly extirpated, of this species is known in Madera County. With a minimum elevation of 440 feet, the Jamison Ranch Conservation Easement is on the edge of the recorded upper elevational limit for the species (440 feet) within the Central Valley.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>
Hairy orcutt grass <i>Orcuttia pilosa</i>	E	NLAA	<p>MNT Specific Plan Area: Unlikely. Suitable habitat occurs within the MNT Specific Plan Area, but the species was not detected during surveys (Stebbins 1997a, VNLC 2014), and there are no current or historical occurrences of this species in Fresno County.</p> <p>Jamison Ranch Conservation Easement: Possible. Suitable habitat occurs within the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>

Species	Status ¹	Effects ²	Occurrence in the Study Area ³
Hartweg's golden sunburst <i>Pseudobahia bahiifolia</i>	E	NE	<p>MNT Specific Plan Area: Absent. In Fresno County, this plant is strongly associated with Rocklin sandy loam, pumiceous variant, which is absent from the MNT Specific Plan Area. This species was not observed on site during any previous plant surveys (Stebbins 1997a, VNLC 2014).</p> <p>Jamison Ranch Conservation Easement: Absent. The species is known only from associations with the soils of the Rocklin and Amador series, both of which are absent from the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Absent. The species is known only from associations with the soils of the Rocklin and Amador series, both of which are absent from the Point Millerton Conservation Area.</p>
San Joaquin adobe sunburst <i>Pseudobahia peirsonii</i>	T	NE	<p>Study Area: Absent. Heavy adobe clay soils in which this species most often occurs are absent from the Study Area. In addition, this species was not observed within the MNT Specific Plan Area during any previous plant surveys (Stebbins 1997a, VNLC 2014).</p>
San Joaquin Valley orcutt grass <i>Orcuttia inaequalis</i>	T	NLAA	<p>MNT Specific Plan Area: Possible. Suitable habitat occurs within the MNT Specific Plan Area, but the species was not detected during surveys (Stebbins, 1997a, VNLC 2014).</p> <p>Jamison Ranch Conservation Easement: Possible. Suitable habitat occurs within the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>
Succulent owl's clover <i>Castilleja campestris</i> ssp. <i>succulenta</i>	T	NLAA	<p>MNT Specific Plan Area: Possible. Suitable habitat occurs within the MNT Specific Plan Area, but the species was not detected during surveys (Stebbins 1997a, VNLC 2014).</p> <p>Jamison Ranch Conservation Easement: Possible. Suitable habitat occurs within the Jamison Ranch Conservation Easement. The southern portion of Jamison Ranch Conservation Easement overlaps with succulent owl's clover critical habitat and one occurrence is documented within one mile of the Jamison Ranch Conservation Easement.</p> <p>Point Millerton Conservation Area: Absent. Vernal pool habitat is absent from the Point Millerton Conservation Area.</p>

Species	Status ¹	Effects ²	Occurrence in the Study Area ³
<p>1 Status= Listing of federally special status species E: Listed as Endangered T: Listed as Threatened X: Critical Habitat designated for this species</p> <p>2 Effects = Effect determination MAA: Proposed Action is Likely to Affect, and May Adversely Affect the species. NE: No Effect from the Proposed Action to federally listed species NLAA: Proposed Action May Affect, but is Not Likely to Adversely Affect species.</p> <p>3 Definition Of Occurrence Indicators Unlikely: Species or sign not observed in the Action Area, conditions marginal for occurrence Absent: Species not recorded in study area and/or habitat requirements not met Possible: Species has the potential to occur in the action area Present: Species recorded in or near action area and habitat present</p>			

Critical Habitat The Proposed Action Area for the MNT Specific Plan Area and the Jamison Ranch Conservation Easement encompasses designated critical habitat for the California tiger salamander (SSJ-2) and for vernal pool fairy shrimp (VERFS-24B). No critical habitat units overlap the Point Millerton Conservation Area. No other critical habitat occurs within the Action Area.

Districts Proposing Transfers

Table 5 was prepared using an official species list obtained from the FWS and a query of the CNDDDB, comprising the counties and the U.S. Geological Survey 7½ minute quadrangles that overlie Arvin-Edison, Lower Tule, and Terra Bella. The Proposed Action Area within these districts consists primarily of agricultural land.

Table 5 Federally Listed Species with the Potential to Occur in the District's Action Area

Species	Status
INVERTEBRATES	
Conservancy Fairy Shrimp (<i>Branchinecta conservatio</i>)	Endangered
Kern primrose sphinx moth (<i>Euproserpinus euterpe</i>)	Threatened
Longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	Endangered
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	Threatened
Vernal Pool Fairy Shrimp (<i>Branchinecta lynchi</i>)	Threatened
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	Endangered
FISH	
Delta smelt (<i>Hypomesus transpacificus</i>)	Threatened
Little Kern golden trout (<i>Oncorhynchus aquabonita whitei</i>)	Threatened
Owens tui chub (<i>Gila bicolor snyderi</i>)	Endangered
AMPHIBIANS	
California red-legged frog (<i>Rana draytonii</i>)	Threatened
California tiger salamander (<i>Ambystoma californiense</i>)	Threatened
Sierra Nevada yellow-legged frog (<i>Rana sierrae</i>)	Proposed
Southern mountain yellow-legged frog (<i>Rana muscosa</i>)	Proposed
Yosemite toad (<i>Bufo canorus</i>)	Candidate
REPTILES	

Species	Status
Blunt-nosed leopard lizard (<i>Gambelia sila</i>)	Endangered
Giant garter snake (<i>Thamnophis gigas</i>)	Threatened
BIRDS	
California condor (<i>Gymnogyps californianus</i>)	Endangered
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	Endangered
Southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	Endangered
Western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	Threatened
Western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	Candidate
MAMMALS	
Buena Vista Lake shrew (<i>Sorex ornatus relictus</i>)	Endangered
Fisher (<i>Martes pennant</i>)	Candidate
Fresno kangaroo rat (<i>Dipodomys nitratoides exilis</i>)	Endangered
Giant kangaroo rat (<i>Dipodomys ingens</i>)	Endangered
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	Endangered
Sierra Nevada bighorn sheep (<i>Ovis canadensis californiana</i>)	Endangered
Tipton kangaroo rat (<i>Dipodomys nitraoides nitraoides</i>)	Endangered
PLANTS	
Bakersfield cactus (<i>Opuntia treleasei</i>)	Endangered
California jewelflower (<i>Caulanthus californicus</i>)	Endangered
Greene's tuctoria (<i>Tuctoria greenei</i>)	Endangered
Hairy orcutt grass (<i>Orcuttia pilosa</i>)	Endangered
Hartweg's golden sunburst (<i>Pseudobahia bahiifolia</i>)	Endangered
Hoover's spurge (<i>hamaesyce hooveri</i>)	Threatened
Keck's checker-mallow (<i>Sidalcea keckii</i>)	Endangered
Kern Mallow (<i>Eremalche kernensis</i>)	Endangered
Ramshaw sand-verbena (<i>Abronia alpine</i>)	Candidate
San Joaquin adobe sunburst (<i>Pseudobahia peirsonii</i>)	Threatened
San Joaquin Valley orcutt grass (<i>Orcuttia inaequalis</i>)	Threatened
San Joaquin woolly-threads (<i>Monolopia congdonii</i>)	Endangered
Springville clarkia (<i>Clarkia springvillensis</i>)	Threatened
Succulent owl's clover (<i>Castilleja campestris</i> ssp. <i>succulenta</i>)	Threatened

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve the delivery of additional CVP M&I water supplies within the County's service area. There would be no change to current conditions unless another non-CVP water supply could be found. At this time, no alternative water supplies have been identified.

Proposed Action

As described in Table 4, Reclamation has determined that the Proposed Action would have no effect on Delta smelt, California red-legged frog, blunt-nosed leopard lizard, giant garter snake, Fresno kangaroo rat, Hartweg's golden sunburst, or San Joaquin adobe sunburst.

Valley Elderberry Longhorn Beetle The single isolated valley elderberry plant located within the MNT project area will be disturbed during construction activities and during the life of the development within an area up to 20 feet from the plant. However, surveys of this plant did not reveal evidence of use by the beetle (i.e. exit holes), and the plant is unlikely to be colonized or attractive to this species since nearby records of this poorly dispersing species are not known. Use of this plant by valley elderberry longhorn beetle is unlikely; therefore, Reclamation has determined that the effect of the Proposed Action is discountable and not likely to adversely affect this species.

San Joaquin Kit Fox Based on surveys and lack of favorable habitat conditions, San Joaquin kit fox are unlikely to occur in the Action Area. Additionally, avoidance and minimization measures will be employed during project construction. Consequently, because it is highly unlikely that San Joaquin kit fox would occur in the Action Area, and because avoidance measures will be employed during construction, the effects of the Proposed Action are either insignificant or discountable and Reclamation has determined that San Joaquin kit fox is not likely to be adversely affected by the Proposed Action.

Central Valley Spring-run Chinook salmon and Central Valley Steelhead Based on water treatment and measures to reduce pollutants entering creeks, settlement funds to be used by CDFW for conservation purposes, the inclusion of other mitigation efforts (e.g. the Jamison Ranch Conservation Easement and Point Millerton Conservation Area) into the Proposed Action, previous EPA findings (EPA 2010), and historical creek flow regimes, Reclamation has concluded that effects from the potential degradation of water quality reaching the San Joaquin River from the project and its resultant effects to Central Valley Spring-run Chinook salmon would be insignificant. Further, Reclamation has determined that White Fox Creek and Little Dry Creek would infrequently connect with the San Joaquin River in fashion that could enable listed fish to access these creeks. Flows in Little Dry Creek would not support the freshwater biological requirements of Central Valley Spring-run Chinook salmon for holding and then spawning. Requirements for Central Valley Steelhead may infrequently be met, and possibly only for a portion of the life history (i.e. spawning). Consequently, the effects of the Proposed Action would be insignificant or discountable and Reclamation has determined that the Proposed Action may affect, but is not likely to adversely affect Central Valley Spring-run Chinook salmon and Central Valley Steelhead.

Vernal Pool Species and Critical Habitat The Proposed Action will result in destruction of 0.9261 acres of vernal pools and result in permanent indirect impacts to 0.4100 acres (sum total impact of 1.3361 acres). There are no records for Greene's tuctoria, at vernal pools that would be destroyed and surveys have not documented their presence in the Action Area. Consequently, they are not likely to occur in the Action Area and the effects of the project on this species are discountable. As such the Reclamation has determined that the Proposed Action may affect, but is not likely to adversely affect Greene's tuctoria.

There are no records for succulent owl's clover, hairy Orcutt grass, or San Joaquin Valley Orcutt grass at vernal pools that would be destroyed during project construction and surveys have not documented their presence in the Action Area. However, there is still uncertainty as to whether these species could be present. If present in a vernal pool that would be destroyed during project construction, take would occur. Consequently, Reclamation has determined that the effects of the Proposed Action may affect San Joaquin valley Orcutt grass, hairy Orcutt grass, and succulent owl's clover. This affect would be offset by the benefits to these species that would occur through protection via Jamison Ranch Conservation Easement where the species may possibly occur.

Reclamation has determined that the Proposed Action may adversely affect both vernal pool fairy shrimp and California tiger salamander because habitat occupied by these species necessary for their survival and persistence would be destroyed. The Proposed Action would destroy 0.9261 acres of vernal pools and result in permanent indirect impacts to 0.4100 acres (sum total impact of 1.3361 acres) by filling vernal pool wetlands. In addition, 766 acres of Critical Habitat for California tiger salamander, including vernal pools and upland habitat would be destroyed by the project through filling of wetlands and destruction of grassland habitat. Consequently, the Proposed Action would adversely affect Critical Habitat for both vernal pool fairy shrimp and California tiger salamander.

Conservation measures incorporated into the Proposed Action would ensure that direct and indirect effects on listed species and critical habitat are minimized and/or avoided and mitigated. These conservation measures include:

- off-site preservation and management of occupied vernal pool fairy shrimp and California tiger salamander habitat on the Jamison Ranch Conservation Easement,
- off-site preservation and management of occupied California tiger salamander habitat on the Point Millerton Conservation Area,
- on-site preservation of occupied vernal pool fairy shrimp and California tiger salamander habitat in the MNT Specific Plan Area,
- preservation and management of an open space corridor along White Fox Creek,
- development and implementation of an erosion control plan to protect water quality in White Fox Creek,
- take avoidance measures for California tiger salamander and San Joaquin kit fox, and
- preservation of key habitat areas through participation in the Open Space and Natural Resource Plan for the Millerton, Dry Creek, and Sierra Foothill areas.

Collectively, these measures would ensure that the Proposed Action avoids and/or minimizes adverse effects consistent with the survival and recovery of these species.

The areas within the three water districts consist of developed farmland which would not be subject to any ground disturbance or land use change as a result of the Proposed Action. As such, Reclamation has determined that there would be no effect to the listed species included in Table 5 as a result of the Proposed Action.

Cumulative Impacts

Environmental compliance within the MNT Specific Plan Area portion of the Action Area has been a focus of state, local, and private entities for more than a decade. Fresno County identified and selected the MNT Specific Plan Area during studies conducted in the early 1980s that were in support of its Sierra Nevada-Sierra Foothills General Plan update (Land Use Associates 1984). The Sierra North Regional Plan included a number of elements that directed future planning efforts for MNT. These have been addressed under the current project.

Additionally, a tribal lands parcel held in federal trust is located in the northeast corner of the MNT Specific Plan Area, though not subject to Section 7 or Section 10 consultation, this parcel is situated within MNT Specific Plan Area boundaries. Developments of tribal lands within the MNT Specific Plan Area are not required to comply with the terms of the Millerton Specific Plan and Millerton Specific Plan Mitigation Measures and Monitoring Program Matrix. Additional development in MNT Specific Plan Area, besides the MNT development footprint covered in this EA, and to which water could be provided through the County, would require additional environmental coverage, as necessary.

The Brighton Crest development is situated along the eastern boundary of the MNT Specific Plan Area. An expansion of Brighton Crest has been proposed that would add 250 new homes within the existing boundaries of the Brighton Crest development. The residential construction proposed for the existing Brighton Crest development is independent of the Action proposed for the MNT Specific Plan Area, and the effects of developing additional areas within these areas are the subject of a separate Endangered Species Act consultation.

Several other development projects in the vicinity of the MNT Specific Plan Area may affect species, particularly California tiger salamander and vernal pool species, and/or critical habitat. River Ranch Estates is a proposed 1,800-acre development within the 15,000-acre Rio Mesa growth area. Rio Mesa is a 15,000-acre area north of Fresno along the Madera County side of the San Joaquin River. The effects of this development, which would rely on water from the San Joaquin River, are also the subject of a separate Endangered Species Act consultation. The North Fork Village-1 Specific Plan site is located about one mile northwest of Friant in Madera County. The project is a proposed 2,238-acre development that includes residential and commercial facilities. Up to 2,966 dwelling units would be built. Several other residential developments have also been proposed on the north side of Millerton Lake.

Other types of developments or projects have also been proposed in the vicinity of the Action Area, including a project to widen Millerton Road to a 4-lane divided road from Friant to Sky Harbor Road. A new casino is proposed at Big Sandy Rancheria on 48 acres of trust land east of Friant near the intersection of Auberry and Millerton roads. This project is also likely to require additional infrastructural construction such as roads and pipelines in the surrounding areas. Any State, local or private actions that could be related to a federal action, such as road construction or urban development, would be examined under consultation for the federal Action.

Within the vicinity of the Action Area, future state, local, or private actions are most likely to affect California tiger salamander and vernal pool plants and animals through the loss and degradation of habitat as a result of urbanization and road and utility right-of-way expansion,

through direct effects related to construction, and indirect effects associated with increased traffic and unregulated use of occupied habitat by humans and their pets. Few state, local, or private actions are expected to occur in the vicinity of the Action Area without the completion of a Section 7 consultation with Reclamation, the Corps, or the Federal Highway Administration. Those without a federal nexus are expected to complete a Section 10 consultation.

To address cumulative effects associated with future non-federal actions, MNT development proponents participated in the creation of an Open Space and Natural Resource Plan for the Millerton, Dry Creek, and Sierra Foothill areas that established mitigation fees to be used for the protection of sensitive resources. Resource protection shall occur through the preservation of key habitat areas and open and continuous wildlife corridors, and zoning restrictions such as lighting restrictions on hilltops to mitigate glare. The impact fee per housing unit was set in 1999 and shall be adjusted for inflation.

A conceptual MNT Open Space and Natural Resource Plan was developed partially in response to the larger Open Space and Natural Resource Plan. In 1999, a group of developers, biologists, and land managers who were collectively interested in the preservation of the natural resources of the Millerton area drafted an outline of the MNT Open Space and Natural Resource Plan to be administered by a board of directors and to be implemented according to an adopted “Articles of Organization.” The geographic area covered by the conceptual plan is the entire MNT Specific Plan Area. Development of the MNT Specific Plan Area will generate fees that shall be paid to the Sierra Foothill Conservancy for the purchase of conservation easements on open space parcels in the area. The Sierra Foothill Conservancy has targeted parcels on McKenzie Table, Big Table, and in the Sierra foothills adjacent to these geologically unique landforms for acquisition or conservation easement.

Proponents of the MNT and other developments in the region also entered into a settlement agreement with CDFW, under which the developers will contribute \$500 per new development unit in the MNT Specific Plan Area to a fund to be used by CDFW to protect, conserve, restore, enhance, manage, and maintain fish, wildlife, native plants and their habitats in the San Joaquin River area from Friant Dam to Vernalis, California. These contributions will allow CDFW to make improvements to habitat for listed species, including Central Valley Spring-run Chinook salmon and Central Valley Evolutionarily Significant Unit steelhead.

Consequently, implementation of the Proposed Action will contribute to the mitigation of cumulative impacts that may result from future regional development.

3.4 Cultural Resources

Cultural resources is a term used to describe both ‘archaeological sites’ depicting evidence of past human use of the landscape through material culture and the ‘built environment’ which is represented in structures such as dams, roadways, and buildings. The term, ‘cultural resources’ also applies to traditional cultural properties, sites of religious or cultural significance, and sacred sites. Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation which outlines the Federal Government’s responsibility to the effect on

historic properties. In some cases, particularly on private lands or holdings such as this project, certain state laws may be applicable including but not limited to the California Environmental Quality Act and California Public Resources Code 5097.98 (applies to the disposition of human remains and funerary objects on private lands). Section 106 of the NHPA requires the Federal government to take into consideration the effects of their action on historic properties.

Section 106 is implemented through Federal regulation at 36 CFR Part 800. Although the Section 106 and NEPA processes are independent statutes Reclamation uses the Section 106 process as its primary effort to identify impacts to cultural resources as they apply to NEPA. Reclamation initiated consultation under these regulations with the California State Historic Preservation Officer (SHPO), the Advisory Council on Historic Properties (Advisory Council), Indian Tribes and other interested parties. Cultural resources were identified through research, pedestrian surveys, and consultation with the Table Mountain Rancheria Tribe (TMRT). Cultural resource firms assisted with the identification effects. The TMRT participated in the pedestrian survey. Consultation was implemented through correspondence, multiple meetings, field visits, telephone calls, and review of reporting. Consideration was given to effects to the direct and indirect APE. Cultural resources avoidance, protection and management will be achieved project design which will include conservation easements or deed restrictions for all prehistoric archaeological sites.

3.4.1 Affected Environment

On November 18, 2013, TMRT requested to participate as a Consulting Party under Section 106 of the NHPA. The Tribe expressed concerns regarding significant cultural sites and sacred sites located within the project area. Reclamation responded on December 18, 2013 acknowledging the Tribes role in the NHPA process and provided a preliminary area of potential effect (APE) map. Reclamation also contacted the State of California Native American Heritage Commission (NAHC) was asked to review the Sacred Lands file for information on Native American cultural resources within the project area. The NAHC responded on December 20, 2013, indicating they did have record of Native American traditional cultural place in the general area of the project. The NAHC provided a list of eight other individuals/ organizations recognized and unrecognized, in addition to the TMRT. Consultation letters to these individuals were sent on January 15, 2014 to all the additional contacts. No responses have been received to date from any of the contacts, other than the TMRT.

Between October 15 and November 29, 2013, a reconnaissance-level cultural resources survey was performed of the 1,259-acre Project Area. The field survey was directed by Principal Investigator C. Kristina Roper, M.A., with the assistance of archaeological technicians. Table Mountain Rancheria Cultural Resources personnel also participated in the inventory effort. In general, surface visibility within the APE was good to excellent. In areas where surface visibility was less than 50 percent, surface vegetation was periodically scraped away to view mineral soil.

Thirty-two previously undocumented cultural resources were identified through the pedestrian surveys. These sites were revisited and documented to conform to current standards of resource documentation as necessary. Six of the previously identified Native American milling sites, along with previously unidentified milling features, artifacts, and a midden deposit, were combined into one large occupation site making the total of sites 45, prehistoric and historic.

Of the 45 cultural resources identified within the study area, all but two are Native American in origin. The historic era sites include a rock retaining wall and associated artifact scatter and the second is a historic ranch residence and associated artifact scatter. The Native American resources include milling features, rock art, a hunting blind, a quarry, artifact scatters, and midden deposits. There is a high likelihood that buried surfaces are present in portions of the project APE, which has the potential for obscuring archaeological deposits from pedestrian archaeological surveys. Geo-archaeological modeling has identified Holocene-age floodplains along several of the small the drainages, such as White Fox Creek.

Through consultation with the Advisory Council, SHPO, TMRT, and the MNT developers, Reclamation has assumed all of the identified prehistoric archaeological sites within the direct APE as eligible for the National Register and avoids them through design of the project, preserving them through several measures (see Table 1). To facilitate avoidance and preservation of the sites, the developers would place deed restrictions or conservation easements over the sites in all possible situations where they occur relative to project elements and open space. The developer will also establish covenants, conditions, and restrictions to memorialize the requirement for proper management and preservation in perpetuity. Through consultation between Reclamation, SHPO, TMRT, and the MNT developers, sites and/or features may be capped with soil and vegetation to ensure preservation-specific areas of concern. The MNT developers will address the long-term funding mechanisms available through the County service area that has been set up to manage the easements (e.g. trash collection, fence repair). All unanticipated discoveries of cultural resources during construction will be managed in accordance with the project unanticipated discovery plan. Inadvertent discovery of human remains will be addressed under Section 7050.5 of the California Health and Safety Code and Section 5097.98 of the California Public Resources Code.

3.4.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not have a Federal action and would not have an undertaking requiring compliance with NHPA. Conditions would remain the same and there would be no impacts from this proposed development.

Proposed Action

The Proposed Action has the potential to impact unknown buried archaeological resources that may be present with no surface manifestation. Mitigation measures identified within Table 1 would ensure unknown cultural resources and/or human remains are protected in accordance with federal and state laws should they be inadvertently discovered during construction.

Cumulative Impacts

Significant cumulative impacts to cultural resources typically occur when important sites, features, or artifacts are lost, damaged, or destroyed without appropriate mitigation such as recordation or data recovery. As these resources are destroyed or displaced, important information is lost and connections to past events, people and cultures are diminished. As Fresno County continues to grow, cultural resources may be lost. Fresno County contains extensive cultural resources, including Native American archaeological sites and historical sites associated with early Euro-American settlement, ranching, and agriculture. Native American

archaeological sites in the county include village sites, burial grounds, procurement sites, and lithic scatters. Historic sites in the region are quite diverse and include buildings, a 19th century military outpost, ranches, and homes, among others. Impacts to these cultural resources are likely to occur as residential and commercial growth occurs in Fresno County.

As discussed above, cultural resources are located within and adjacent to the Proposed Action's direct APE. Moreover, the records search and archival research indicate that the region is sensitive for both prehistoric and historical resources. Construction of the MNT development could affect known cultural resources and has the potential to affect unknown buried archaeological resources, as archaeological sites may be present with no surface manifestation. However, project design includes avoiding destruction of and provides protective measures that would result in no adverse effects to known cultural resources. Furthermore, other cumulative projects would be required to conform to the appropriate regulatory framework(s), including local preservation ordinances, and/or Section 106 of the NHPA. Adherence to these frameworks would help insure that potential impacts to cultural resources are considered and mitigated. The Proposed Action would also comply with these requirements. Accordingly, no cumulatively significant impacts to cultural resources would occur.

3.5 Global Climate Change

3.5.1 Affected Environment

Climate change refers to significant change in measures of climate (e.g., temperature, precipitation, or wind) lasting for decades or longer. Many environmental changes can contribute to climate change [changes in sun's intensity, changes in ocean circulation, deforestation, urbanization, burning fossil fuels, etc.] (EPA 2014a).

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). Some GHG, such as carbon dioxide (CO₂), occur naturally and are emitted to the atmosphere through natural processes and human activities. Other GHG (e.g., fluorinated gases) are created and emitted solely through human activities. The principal GHG that enter the atmosphere because of human activities are: CO₂, methane (CH₄), nitrous oxide, and fluorinated gasses (EPA 2014a).

During the past century humans have substantially added to the amount of GHG in the atmosphere by burning fossil fuels such as coal, natural gas, oil and gasoline to power our cars, factories, utilities, and appliances. The added gases, primarily CO₂ and CH₄, are enhancing the natural greenhouse effect, and likely contributing to an increase in global average temperature and related climate changes. At present, there are uncertainties associated with the science of climate change (EPA 2014b).

Climate change has only recently been widely recognized as an imminent threat to the global climate, economy, and population. As a result, the national, state, and local climate change regulatory setting is complex and evolving.

In 2006, the State of California issued the California Global Warming Solutions Act of 2006, widely known as Assembly Bill 32, which requires California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide GHG emissions.

CARB is further directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020.

In addition, the EPA has issued regulatory actions under the Clean Air Act as well as other statutory authorities to address climate change issues (EPA 2014c). In 2009, the EPA issued a rule (40 CFR Part 98) for mandatory reporting of GHG by large source emitters and suppliers that emit 25,000 metric tons or more of GHG [as CO₂ equivalents (CO₂e) per year] (EPA 2009). The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change and has undergone and is still undergoing revisions (EPA 2012c).

3.5.2 Environmental Consequences

No Action

There would be no impacts as current conditions would remain the same.

Proposed Action

Emissions of CO_{2e} are estimated to be 20,615 metric tons, which is below the EPA's 25,000 metric tons per year threshold for annually reporting GHG emissions. Accordingly, the Proposed Action would result in below *de minimis* impacts to global climate change.

Cumulative Impacts

Impacts from GHG are considered to be cumulative impacts; however, delivery of water with or without the Proposed Action is part of the existing baseline conditions of the CVP and is not expected to produce additional GHG that could contribute to global climate change. In addition, estimated annual CO₂ emissions required for the Proposed Action is 20,615 metric tons per year, which is below the 25,000 metric tons per year threshold for reporting GHG emissions. As a result, the Proposed Action is not expected to contribute cumulative adverse impacts to global climate change. In addition, measures in the Mitigation Measures and Monitoring Program Matrix (Appendix A) would be implemented to further reduce GHG emissions associated with the development.

CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility and therefore water resource changes due to climate change would be the same with or without the Proposed Action.

3.6 Water Resources

3.6.1 Affected Environment

Friant Division

The Friant Division was authorized by Congress under the concept of conjunctive use where CVP water was meant to be a supplemental supply to alleviate groundwater overdraft in the area. Based on the conjunctive use concept within the Friant Division, contractors are expected to continue mixed use of CVP and other surface water supplies and groundwater, with greater emphasis on groundwater use during dry periods when surface water is limited or expensive and percolate excess surface water in wet years. The Friant Division is an integral part of the CVP, but is hydrologically independent and therefore operated separately from the other divisions of the CVP. Major facilities of the Friant Division include Friant Dam and Millerton Lake, the Madera Canal and the Friant-Kern Canal.

As shown in Table 6, Friant Division CVP contractors have recently experienced reduced water supply allocations due to hydrologic conditions and implementation of the Stipulation of Settlement in *NRDC, et al., v. Kirk Rodgers, et al.* Based on hydrologic conditions, Reclamation declared a 0 percent Friant Division Class 1 and Class 2 water supply allocation² in 2014 and 2015.

Table 6 Friant Division Allocations 2005 to 2015

Contract Year	Class 1 Allocation (%)	Class 2 Allocation (%)
2015	0	0
2014	0	0
2013	62	0
2012	50	0
2011	100	20
2010	100	15
2009	100	15
2008	100	5
2007	65	0
2006	100	10
2005	100	10
Average	77.7	7.5

Source: Reclamation's Water Allocations (Historical) <http://www.usbr.gov/mp/cvo/>

San Joaquin River Restoration Program In 2006, the San Joaquin River Restoration Program (SJRRP) was established to implement the Stipulation of Settlement in *NRDC, et al. v. Kirk Rodgers et al.* The Settlement's two primary goals include: (1) restoration and maintenance of fish population in the San Joaquin River below Friant Dam to the confluence of the Merced

² Class 1 water is considered as the first 800,000 AF supply of CVP water stored in Millerton Lake, which would be available for delivery from the Friant-Kern Canal and/or Madera Canals, or directly off of the Dam, as a relatively dependable water supply during each Contract Year². Class 2 water is considered as the next 1,400,000 AF supply of non-storable CVP water which becomes available in addition to the Class 1 supply, and because of its uncertainty as to the availability and time occurrence, would not be dependable in character and would be furnished only if and when available as determined by Reclamation per Contract Year (a Contract Year is from March 1 of a given year through February 28/29 of the following year).

River; and (2) management of water resources in order to reduce or avoid adverse water supply impacts to Friant Division long-term contractors. The SJRRP is a long-term effort to restore flows to the San Joaquin River from Friant Dam to the confluence of Merced River in order to meet the two goals established in the Settlement (SJRRP 2014). The Settlement requires that Reclamation modify releases from Friant Dam from October 1 to September 30 for a program of interim flows in order to collect pertinent scientific data and to implement a monitoring program. These flows started October 1, 2009. Full restoration flows were scheduled to start no later than January 1, 2014. However, due to a critical low water year, flows from Friant Dam were decreased beginning February 1, 2014 until all restoration flows stopped. Restoration flows will not re-start until conditions improve.

Arvin-Edison Water Storage District

Arvin-Edison is a Friant Division CVP contractor with a water service contract (Contract No. 14-06-200-229AD) for up to 40,000 AFY of Class 1 and 311,675 AFY of Class 2 Friant Division CVP supplies for irrigation and municipal purposes. Arvin-Edison has historically made available a portion of its Friant Division CVP water supply to other CVP contractors located on the eastside of the San Joaquin Valley in exchange for alternate CVP supplies originating from the Delta, diverted and wheeled through the California Aqueduct for ultimate delivery to Arvin-Edison. Due to a decrease in supply reliability, cost increases, and water quality concerns, several of these exchanges are no longer feasible to the extent they once were. As a result, it has been necessary for Arvin-Edison to identify and implement additional programs to manage its highly variable CVP water supplies. Other surface water supplies available to Arvin-Edison include water from the State Water Project, Kern River, and flood flows when available. Arvin-Edison manages these surface water supplies by using an underlying groundwater reservoir to regulate water availability and to stabilize water reliability by percolating water through spreading basins in addition to water management programs (i.e. transfers/exchanges) with other water agencies outside its service area. Arvin-Edison owns and operates spreading/percolation/recharge basins and groundwater extraction wells, which are used to supply previously banked groundwater to its landowners within its service area when surface water supplies are deficient.

County of Fresno

As described previously, the County is a Cross Valley CVP contractor with a water service contract (Contract No. 14-06-200-8292A) for up to 3,000 AFY that is provided for M&I uses to specific developments within its CVP service area (Figure 1). The County draws its water directly from Millerton Lake after its Delta supply has been exchanged for Friant supplies with Arvin-Edison (see Figure 2). The County's CVP water supplies have been administered by Arvin-Edison for the last 20 years pursuant to an agreement between the County and Arvin-Edison. The proposed transfer by Arvin-Edison would be in addition to the water that has been supplied to the County under their agreement.

The County has several Service Areas that administer water deliveries to developments in its CVP service area. County Service Area 34 (CSA 34) would administer water deliveries to the MNT Specific Plan Area. At present approximately 929 AFY is delivered by CSA 34 for the Brighton Crest development (841 AFY) and Tract 4870 (88 AFY).

Millerton New Town The County's 2000 General Plan requires new developments to demonstrate that they have adequate sustainable surface water supplies for a minimum of 25 years (County of Fresno 2014). The MNT EIR estimated that on average individuals within MNT would consume 120 gallons per person per day with the assumption that demands would be low (approximately 70 gallons per day) during winter months and high (more than 150 gallons per day) during summer months (Land Use Associates 1984). As the development is expected to accommodate approximately 10,000 people at full build-out, total water needs would annually average about 1,343 AF (3.68 AF/day x 365 days). Most of this demand would be associated with residential (low, medium, and medium-high density) land uses but also includes non-residential support uses, such as schools, commercial and government uses, and landscaping (Land Use Associates 1984).

CVP water proposed for transfer to the County for use in the MNT Specific Plan Area would be drawn directly from Millerton Lake through existing infrastructure (see Figure 2). The County has installed a secondary pipeline parallel to the existing pipeline as part of a contingency plan should malfunction or failure occur (Reclamation and County of Fresno 2013). The secondary pipeline provides redundancy and allows maintenance to occur to the system without disrupting water supply deliveries. For MNT, water that is drawn through this system would be delivered to an existing water treatment plant that would be scaled up as build-out occurs and demand increases. Treated water would be stored in two 350,000 gallon tanks and then distributed throughout the development in accordance with the storage and distribution plan described in the MNT EIR (Land Use Associates 1984). CSA 34 would operate and maintain the water distribution system for the MNT development.

Lower Tule River Irrigation District

Lower Tule is a Friant Division CVP contractor with water service contract (Contract No. I75r-2771D) for up to 61,200 AFY of Class 1 and 238,000 AFY of Class 2 Friant Division CVP supplies. In addition, Lower Tule has a Cross Valley CVP water service contract (Contract No. 14-06-200-8237A) for up to 31,200 AFY from the Delta. Additional surface water supplies include pre-1914 water right water from the Tule River with an average annual yield of 40,000 AF. This water is developed and stored behind Success Dam and delivered to Lower Tule via the Tule River and its distributaries. Lower Tule maintains and operates 12 recharge and regulating basins, covering approximately 3,000 acres. When excess surface water is available, Lower Tule uses the 12 groundwater recharge facilities to recharge the aquifer. At present Lower Tule does not own or control groundwater extraction facilities. All groundwater pumping is done by landowners who utilize privately owned wells. Lower Tule has estimated an annual irrigation demand of approximately 346,500 AF. On average, the district supplies approximately 201,400 AFY of surface water leaving approximately 145,100 AFY of demand to be met by groundwater pumping. In 2012, Lower Tule completed construction of an Intertie Canal between its Wood Central Ditch and its Casa Blanca Canal. The new Intertie Canal allows Lower Tule to capture, use, and/or store otherwise unusable floodwater from the Tule River creating an additional source of water for use in portions of the District that previously only received CVP water.

Terra Bella Irrigation District

Terra Bella is a Friant Division CVP contractor with a water service contract (Contract No. I75r-2446D) for up to 29,000 AFY of Class 1 Friant Division CVP supplies for irrigation and

municipal purposes. Terra Bella also has access to groundwater recharge basins at the confluence of the FKC and Deer Creek. In years when the Friant declaration meets or exceeds 100 percent Class 1, Terra Bella typically has water in excess of in-district demands and delivers that water to the groundwater recharge basins for future use. Only recharged CVP water is pumped for use within the District. No other groundwater is pumped by the District.

3.6.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve the delivery of CVP M&I water supplies within the County's service area beyond those already approved. Developers would need to acquire additional (non-CVP) water supplies in order to meet the needs of the development as groundwater resources are not an option. At this time, no alternative water supplies have been identified.

Proposed Action

As described previously, the MNT EIR estimated that total water needs for the MNT Specific Plan Area would annually average about 1,343 AF (3.68 AF/day x 365 days) at full build-out. Under the Proposed Action, a cumulative total of up to 2,290 AF of Friant Division CVP water would be annually transferred to the County to meet the needs of the development. Therefore, the base supply from Arvin-Edison (up to 1,520 AFY) would meet all demands at full build-out and would be further supplemented by Terra Bella (up to 770 AFY). Lower-Tule would also provide a back-up supply of up to 1,520 AFY should Arvin-Edison be unable to deliver its' transferred water in any given year. As shown in Table 6, Friant Division Class 1 contractors have received more than 50 percent of their Class 1 allocation in most years; however, due to ongoing drought conditions and low reservoir storage levels Friant Division Contractors received an unprecedented 0 percent Class 1 allocation for 2014 and 2015. It is possible that over the term of the proposed transfers that this could occur again and a CVP water supply may not be available for delivery to the development. Should this occur, Arvin-Edison has determined that they would be able to provide water supplies from other sources besides Friant assuring a long-term water supply to the development.

Cumulative Impacts

The incremental effect of the Proposed Action was examined with impacts from past, present, and reasonably foreseeable future actions in the same geographic area in order to determine whether cumulatively significant impacts could occur. This includes project growth and zoning as detailed in the Fresno County General Plan, the Sierra North Regional Plan, and the Millerton New Town Specific Plan. Major development projects proposed within two miles of the Proposed Action area include: North Fork Village (1,000 units), River Ranch Estates (900 units), Tesoro Viejo (5,000 units), Mira Bella Development (56 units to date with 180 total units planned), Millerton New Town (3,499 units), Marina Estates (80 units), Brentwood at Brighton Crest (420 units), and Wellington Ranch (5,500 units).

The cumulative total of transferred water to the County would not exceed 2,290 AFY and would be drawn by the County through existing infrastructure at Millerton Lake. This water is already allocated to districts, and with this transfer to MNT, there will be no additional impacts on CVP supplies.

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Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA during a 30-day public review period. No comments were received.

4.2 Endangered Species Act (16 U.S.C. § 1531 et seq.)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

Reclamation determined that the Proposed Action may affect but is not likely to adversely affect the Central Valley steelhead and Central Valley spring-run Chinook salmon and submitted a biological evaluation to the National Marine Fisheries Service (NMFS) for informal consultation. NMFS concurred with this determination on May 5, 2015 (Appendix F).

Reclamation determined that the Proposed Action may affect, and is likely to adversely affect California tiger salamander, vernal pool fairy shrimp, and their respective designated critical habitat. Reclamation also determined that the Proposed Action may affect, but is not likely to adversely affect conservancy fairy shrimp, valley elderberry longhorn beetle, fleshy owl's clover, San Joaquin Valley Orcutt grass, hairy Orcutt grass, vernal pool tadpole shrimp, longhorn fairy shrimp, Greene's tuctoria, and San Joaquin kit fox. A biological assessment was submitted to the FWS for formal and informal consultation. FWS concurred with Reclamation's determination on August 28, 2015 (Appendix G).

4.3 National Historic Preservation Act (16 U.S.C. § 470 et seq.)

Section 106 of the NHPA requires federal agencies to consider the effects of federal undertakings on historic properties, properties determined eligible for inclusion in the National Register. Compliance with Section 106 follows a series of steps that are designed to identify interested parties, determine the area of potential effects, conduct cultural resource inventories, determine if historic properties are present within the area of potential effects, and assess effects on any identified historic properties.

Section 106 was concluded when Reclamation made a finding of no adverse effect with the application of avoidance and protective measures. The State Historic Preservation Officer also concurred with Reclamations finding, with additional stipulations that were added to the Cultural Resource Management Plan (Appendix H).

4.4 Clean Water Act (33 U.S.C. § 1251 et seq.)

Section 401 of the Clean Water Act (33 U.S.C. § 1311) prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under sections 402 and 404 of the Clean Water Act (33 U.S.C. § 1342 and 1344). Section 404 of the Clean Water Act authorizes the Corps to issue permits to regulate the discharge of “dredged or fill materials into waters of the United States” (33 U.S.C. § 1344).

Project proponents are in the process of obtaining a Section 404 permit from the Corps and a Section 401 Water Quality Certification from the Regional Water Quality Control Board.

Section 5 Preparers and Reviewers

Molly Burns, Natural Resources Specialist, SCCAO

Rain L. Emerson, M.S., Supervisory Natural Resources Specialist, SCCAO

Ned M. Gruenhagen, Ph.D., Wildlife Biologist, SCCAO

Scott A. Williams, Archaeologist, MP-153

Scott Taylor, Repayment Specialist, SCCAO – reviewer

David E. Hyatt, Resources Management Division Chief, SCCAO – reviewer

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