

RECLAMATION

Managing Water in the West

Finding of No Significant Impact

Contra Costa Water District Emerson Property Inclusion

FONSI-13-032



**U.S. Department of the Interior
Bureau of Reclamation
South-Central California Area Office**

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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.

BUREAU OF RECLAMATION
South Central California Area Office, Fresno, CA


FONSI 13-032

**Contra Costa Water District Emerson
Property Inclusion**



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Date: 10-21-14



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Date: 10/28/2014

See Attachment C to EA


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See Attachment B to EA


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Date: See Attachment



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Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an environmental impact statement is not required for inclusion of the proposed Emerson Ranch development into Contra Costa Water District's (Contra Costa WD's) service area. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) 13-032, *Contra Costa Water District Emerson Property Inclusion*, which is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between September 17, 2014 and October 17, 2014. No comments were received.

Background

Reclamation has a long-term contract with the Contra Costa WD (Contract No. 175r-3401A-LTR1) to deliver Central Valley Project (CVP) water to Contra Costa WD for municipal and industrial (M&I) use. Contra Costa WD delivers raw water to Diablo Water District (Diablo WD), who treats the water and then delivers it to customers in the City of Oakley, among others.

In December 2002, the City adopted the Oakley 2020 General Plan, which outlined the City's plans for future development. This included several new residential areas, among them the 140-acre parcel now known as the Emerson Property. The property is zoned for mixed residential and commercial use. Current plans call for about 578 residential lots, a park with a stormwater pond, and 23.74 acres of commercial development on the property.

The proposed development is currently located outside of Contra Costa WD's contractual service area for CVP water. However, the Contra Costa County Local Area Formation Commission has given Contra Costa WD and Diablo WD permission to extend service outside their jurisdictional boundaries for the purpose of providing water service to the new development. Contra Costa WD is now requesting that Reclamation also approve inclusion of the Emerson Property into the Contra Costa WD contractual service area for receipt of CVP water supplies.

In accordance with the California Environmental Quality Act, the City prepared an Environmental Impact Report (EIR; State Clearinghouse Number 2007052073) for the development. The EIR evaluated and disclosed potential environmental impacts that could result from project implementation, and included mitigation measures for those impacts that were determined to be significant. The Draft EIR

was circulated for public comment from November 19, 2008 to February 4, 2009. In addition, four chapters of the Draft EIR were revised and recirculated for public comment from April 30 to June 14, 2010. Portions of the EIR have been adapted and incorporated into this EA¹.

Until the fall of 2013, the Emerson Property consisted of pastureland with a small amount of rural residential development clustered in the central and northeastern portion of the site. The property included a rural residence/former school building (Iron House School), a second home (Ralph Emerson home), a barn (Tuberculosis barn), and other small ancillary buildings. As the City had already approved the Emerson Property project and issued a grading permit in 2013, the project applicant, Brookfield Homes, decided to move forward with site preparation. Reclamation advised Brookfield Homes that commencement of construction prior to completion of the CVP inclusion review places the CVP inclusion review at risk and would substantially delay that review. Brookfield ceased construction in late December 2013 after it became clear that Reclamation was unable to process the CVP inclusion review or NEPA analysis while the site was actively under construction.

As a result of the site work completed through December 2013, the site has been altered from its previous condition. The western portion of the project site ("Phase 1" area) has been graded in preparation for the first phase of development. In addition, the Ralph Emerson home, which was located in the center of the project site within the Phase 1 area, has been relocated to the eastern portion of the project site ("Phase 2" area). No mass grading has been conducted within the Phase 2 area, and the Iron House School building, the Tuberculosis barn and other ancillary buildings, which are located within the Phase 2 area, have not been disturbed or removed. Activities within the Phase 2 area include the placement of a stockpile of soil amassed from grading operations in the Phase 1 area, equipment and worker staging areas and the creation of three temporary dewatering fields on top of the existing fields using the existing levees and dirt berms. Work at the site has been suspended pending completion of NEPA by Reclamation. Any further ground disturbance prior to the point in time when Reclamation finalizes its NEPA review would require additional NEPA analysis in order for Reclamation to process the CVP Inclusion review.

Proposed Action

Under the Proposed Action, Reclamation would approve the inclusion requested by Contra Costa WD under Article 35 of M&I water service Contract Number I75r-3401A-LTR1 between Contra Costa WD and Reclamation. This would add

¹The Emerson Property project analyzed in the EIR is substantially the same as the project that was finally approved by the City of Oakley. The project as analyzed in the EIR included 662 residential units, a 10.5-acre commercial center, a 5-acre lake feature, and an approximately 3-acre park. Numbers of lots and acreages have changed, but the general layout and function of the proposed development remains the same.

the Emerson Property into the Contra Costa WD CVP service area boundary and allow Contra Costa WD (via the Diablo WD) to deliver CVP water to the property.

Although a source of water is necessary to develop the property, Reclamation does not have land use authority. Following approval of the inclusion, the developer would begin construction on the site in accordance with City and County approvals and permits. As currently planned, the development would include up to 578 residential units, 23.74 acres of commercial uses, 10.13 acres of park and stormwater detention pond area, trails, and various infrastructure improvements. See EA 13-032 for more a more detailed description of the proposed development.

Environmental Commitments

The developer will implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 1 Environmental Protection Measures and Commitments

Resource	Protection Measure
Water Supply	Water mains adequate to serve the proposed development shall be incorporated into the project.
Water Quality	The developer shall comply with Notice of Intent (NOI) and Stormwater Pollution Prevention Plan (SWPPP) requirements.
Water Quality	The developer shall contribute to Contra Costa WD's project to enclose the Contra Costa Canal.
Water Quality	The central water feature of the development shall be designed to handle flows from a 100-year design storm, and to settle sediment adequately to meet discharge standards for Emerson Slough.
Air Quality	The developer shall implement all feasible measures recommended by the Bay Area Air Quality Management District (BAAQMD) to reduce emissions during project operation.
Air Quality	The developer shall incorporate measures to limit fugitive dust during construction, as directed by BAAQMD.
Traffic	A Traffic Control Plan identifying measures such as construction worker parking, additional street sweeping, and traffic flaggers, shall be prepared to decrease congestion caused by construction-related traffic.
Traffic	The developer shall coordinate with any nearby construction projects in order to reduce the potential for cumulative construction traffic impacts.
Traffic	The shopping center driveway on East Cypress Road shall be restricted to right turns only.
Traffic	Sidewalks and trails shall be incorporated into the development to encourage pedestrian and bicycle travel.
Traffic	A Tri-Delta Transit bus stop shall be provided on the north side of Cypress Road near Sellers Avenue to serve the project site.
Traffic	The developer shall contribute to municipal signal and roadway improvements to accommodate increased area traffic.
Noise/ Land Use	All noise-generating machinery shall only be operated during daylight hours. It shall also be maintained in good working order, and noise-generating stationary equipment shall be located as far as practicable from noise-sensitive land uses.
Noise	The developer shall install noise barriers along Cypress Road to reduce residential exposure to high levels of traffic noise.

Findings

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings.

Water Resources

Water Supply

Diablo WD prepared a Water Supply Assessment (WSA) for the proposed project, in order to determine whether available supplies could meet anticipated demand from the new development. The WSA was developed based on an expectation that the Emerson Ranch development would include 662 residential units, a 10.5 acre commercial center, a 5 acre lake feature pond, and a 3-acre park. Using an assumption of 525 gallons per day (gpd) per dwelling unit for residential uses, 2,250 gpd per acre for commercial uses, and 1.45 gpd per acre for park uses, the WSA determined that additional demand would be approximately 420 acre-feet per year (AF/y). This increase in demand was determined to be within Diablo WD's long-term demand and supply projections, and to not require development of additional supply.

The proposed development was later modified to include 578 residential units, 23.74 acres of commercial uses, and approximately 10 acres of park uses. Based on the same use rates for different development types, the water demand for the new layout would be around 400 AF/y. Since this represents less demand than the layout evaluated in the original WSA, the revised plan would also not increase demands beyond available supply.

Although Diablo WD has determined that adequate supply is available to meet the needs of the proposed new development, the existing distribution infrastructure would need to be upgraded to provide adequate service. New water mains would be installed in accordance with Diablo WD's master plan, and would be dedicated to Diablo WD upon completion.

Water Quality

To control for soil erosion during construction, the Regional Water Quality Control Board requires any development that would disturb one-acre or more to obtain a National Pollutant Discharge Elimination System (NPDES) general construction permit (General Permit). The General Permit requires the developer to file a Notice of Intent for the proposed project and to prepare and implement a SWPPP. The SWPPP is a dynamic document prescribing site-specific Best Management Practices (BMPs), with the BMP types and locations based on the construction timeline and monitoring. Compliance with the NPDES General Permit would help prevent sediment from leaving the site during construction.

The Contra Costa Canal (Canal) borders the project site to the north. Due to the proximity of the waterway to the planned residential properties on the project site,

stormwater runoff generated from roofs, roadways, and other new impervious surfaces could affect water quality as a result of increased runoff as well as increased loading of urban pollutants into receiving waters. Contra Costa WD has expressed concern that drainage and seepage originating from the housing development could impact the Canal's water quality. In order to mitigate this concern, the project applicant has agreed to provide a contribution towards the cost of Contra Costa's project to replace the unlined Canal with a pipeline, which was previously approved and is being built in phases as funding becomes available.

Runoff from the Emerson property currently discharges to Emerson Slough. In order to reduce the potential for degradation of water quality in the slough, the development's stormwater would be directed to the central lake feature for flow control and sediment settling. The lake would include lining to separate lake/stormwater from the water table, be graded to a minimum of 10 feet below normal water surface elevation to discourage the growth of aquatic plants, and would have exterior slopes graded to no greater than 4:1. The storage volume associated with the drainage basin would accommodate the runoff from large events up to, and including, the Contra Costa Flood Control District 100-year design storms.

Land Use

Construction of the Emerson Property development would change the land use from mainly pasture land to a residential subdivision with single-family residential lots of varying sizes, a commercial center, park/open space and a stormwater detention pond. Post-construction development would be much denser (~4.05 dwelling units/acre) than current conditions. However, this area is targeted for development of the type being proposed, and the planned development is consistent with the City's 2020 plan, and building permits have been issued by the City.

The developer would also include features to integrate on-site improvements into the area's recreational network. These include trails along the north side of Cypress Road, the west side of Sellers avenue, and on the north edge of the property adjacent to the Canal. The Contra Costa Canal trail would provide a connection to the trail which was constructed as part of the subdivision to the west, and which links to the Marsh Creek Trail and the area's larger network. To satisfy the developer's obligations related to green space, a contribution would be made to the park in-lieu fee program, to facilitate provision of community park facilities north of the Canal. The project applicant would also pay applicable fees in accordance with the East Contra Costa County Habitat Conservation Plan.

The area's current sewer service is provided by a 14-inch force main under Cypress Road. The existing main is not expected to be adequate for the full build-out of the planned expansion area. Therefore, Ironhouse Sanitary District plans to install a second 14-inch force main to upgrade capacity. The new main could be located in Cypress Road or in the trail corridor along the Canal. Depending on

location and timing, this additional utility work may be coordinated with construction on the Emerson property.

Biological Resources

The Proposed Action would result in few impacts to biological resources, as the developer was issued a grading permit by the City, prior to Reclamation completing environmental review or issuing any approvals. Only the construction permit is contingent upon the Proposed Action, which would allow the houses and roads, etc. to be built. The most this would do is to possibly increase disturbance of nearby habitats by human activity and associated pets such as cats.

Reclamation initiated consultation with the U.S. Fish and Wildlife Service (Service) on September 26, 2013. On November 12, 2013, the Service responded, confirming that all of Reclamation's obligations pursuant to section 7 of the Endangered Species Act had been met by the developer's compliance with the Habitat Conservation Plan/Natural Community Conservation Plan (HCP/NCCP) and Section 10 permit. Before this memorandum was received, work had begun on the site; however, neither Reclamation or the Service were aware that this had happened until after the fact.

Cultural Resources

Under the Proposed Action, Reclamation would approve the inclusion requested by Contra Costa WD. Following approval of the inclusion, the developer would re-initiate construction on the Emerson Property as planned. In an effort to identify historic properties within the area of potential effects for the current undertaking, Reclamation initiated consultation with Indian tribes seeking information about any sites or resources of concern in the project area, reviewed cultural resources inventory work reported by consultants on behalf of Contra Costa WD and Brookfield Homes, and initiated consultation with the State Historic Preservation Office (SHPO) seeking concurrence on a finding of no historic properties affected pursuant to 36 CFR § 800.4(d)(1).

Reclamation arrived at this finding of effect due, in part, to the extensive grading and relocation of the Ralph Emerson House that occurred on the property in December 2013. Prior to that time, the portion of the old Emerson Dairy within the current project area of potential effects was considered as contributing to the National Register of Historic Places eligibility of a historic property identified as the Dutch Slough Rural Historic Landscape (Dutch Slough RHL). The approximately 1,100-acre Dutch Slough RHL consists of lands formerly comprising the Burroughs Bros., Central Shuey/Golden State, and Emerson dairies, among other properties. With the relocation of the Ralph Emerson House from its original context and the removal of pastures, trees, and other landscape features formerly associated with dairying activities in the current area of potential effects, Reclamation determined that the historic integrity of the 140-acre Emerson Property had been compromised such that it no longer contributes to the National Register eligibility of the Dutch Slough RHL.

Reclamation initiated consultation with the SHPO concerning this National Register eligibility determination and Section 106 finding of no historic properties affected as described above and received concurrence with the ineligibility determination and Section 106 finding of effect.

With the determination that there are no historic properties eligible for National Register inclusion within the Emerson Property area of potential effect, and the Section 106 finding of no historic properties affected, implementation of the Proposed Action would result in no significant impacts to cultural resources. In the event of an inadvertent discovery during construction, Reclamation may have additional Section 106 obligations pursuant to the Post Review Discovery portion of the regulations at 36 CFR §800.13.

Indian Sacred Sites

The Proposed Action would not impact Indian Sacred Sites as there are no known Indian Sacred Sites in the project area. No direct or indirect impacts to Indian Sacred Sites would occur 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 project area.

Socioeconomic Resources

The proposed construction would create a short-term increase in economic activity due to purchases of equipment and materials, as well as wages paid to laborers. Long-term, development of the property would also produce a variety of economic benefits. Businesses in the new commercial space would provide services and employment opportunities, and the City would benefit from increased sales and property tax revenues in the newly developed area.

Environmental Justice

The Proposed Action would lead to construction of a new residential subdivision. Construction laborers often come from low-income and minority populations, so this would provide a short-term benefit to disadvantaged communities in terms of increased employment opportunities.

Air Quality

Approval of the inclusion request would allow Contra Costa WD to supply CVP water to the Emerson Property. The development of a new subdivision on the property would result in short-term, localized air emissions during construction. There would also be long-term emissions from the new subdivision, from vehicle traffic as well as miscellaneous residential sources (lawnmowers, air conditioning units, etc.).

The City's EIR included an estimate of construction emissions and a comparison to the BAAQMD's thresholds of significance. All criteria pollutant emissions as a result of construction are anticipated to be less than the thresholds of

significance. Further, the developer would be required to comply with BAAQMD's most current standards for controlling fugitive dust on construction sites.

Although construction emissions are not expected to exceed thresholds of significance, the City estimates that long-term annual emissions from the new development would exceed BAAQMD's thresholds of significance for reactive organic gases, oxides of nitrogen, and particulate matter. Therefore the City would require the developer to incorporate mitigation measures pursuant to BAAQMD guidance. These include, but would not be limited to, such measures as using energy-efficient appliances, restricting the types of fireplaces which may be installed, and incorporating design features which encourage travel on foot, by bicycle, or transit.

Energy Use and Global Climate

The Emerson Property project would result in the direct emissions of greenhouse gases (GHG) from vehicle and area sources. According to an Air Quality Impact Analysis prepared for the proposed project, the planned development would generate approximately 24,410 tons of carbon dioxide per year. BAAQMD's applicable threshold of significance for GHG is 4.6 metric tons of carbon dioxide CO₂ equivalent per "service population" per year. Based on an estimate of 3.2 persons per residential household and 26 employees per acre of commercial development, this corresponds to a significance threshold of 11,348 tons per year.

Estimated GHG emissions therefore exceed the significance threshold. However, the City has approved the development, and the proposed development incorporates several features recommended by the California State Attorney General's office to reduce emissions. These include the mixed-use nature of the development, proposed landscaping features, and construction to energy-efficient building standards. In combination with the mitigation measures described in the air quality section above, these would reduce, but not eliminate, the impacts of the Proposed Action.

Traffic

An analysis conducted for the EIR determined that construction-related traffic increases could occur over as much as a 24-month period, with a maximum of approximately 800 truck trips per day during the peak construction period. In addition, during peak construction, as many as 250 construction worker vehicles could be present on-site, as well as 10 to 15 trucks and automobiles at a given time for deliveries, visits and other miscellaneous short-term needs. A Traffic Control Plan identifying measures such as construction worker parking, additional street sweeping, and traffic flaggers, would be prepared by the designer to decrease congestion caused by planned construction-related traffic.

Once constructed, the proposed development would result in increased traffic in the area, which would affect both signalized and unsignalized intersections. A variety of measures have been incorporated into the development to improve

traffic and circulation and mitigate these effects. The shopping center driveway on East Cypress Road would be restricted to right turns only, for both entrance and exit. Facilities such as sidewalks and trails would also be incorporated into the development to encourage pedestrian and bicycle travel, and a Tri-Delta Transit bus stop would be provided on the north side of Cypress Road near Sellers Avenue to serve the project site.

Impacts to the area's larger roadway network would be mitigated by funding various local improvements. These include improvements to East Cypress Road and the proposed minor shopping center entrance, the intersection of Laurel Road and Rose Avenue, and the Main Street intersections at Rose Avenue, Brownstone Road, and Delta Road. In addition, traffic signals would be installed at Main Street and Rose Avenue, Main Street and Brownstone Road, Main Street and Delta Road, and Laurel Road and Rose Avenue.

In addition to routine traffic flows, delays occasionally occur at the at-grade railroad crossing on East Cypress Road. This can cause traffic to back up into adjacent signalized intersections at Main Street and Picasso Drive. Since the proposed development is expected to increase vehicular traffic, these backups could increase incrementally during train crossings.

Noise

Construction associated with the Proposed Action would temporarily increase noise levels in the area. The EIR analysis determined that construction noise levels could range from 70 to 95 decibels (dB) at 50 feet, depending on the specific piece of equipment in use. There are no existing noise-sensitive receivers to the east or north, and residences to the south are at a great enough distance that no excessive noise levels are anticipated. To the west, the existing Cypress Grove development does include single-family residences which could experience elevated noise levels. In addition, as new homes are constructed in the proposed development, some could be close enough to continuing construction to experience levels of noise above the City's exterior noise standard of 55 dB for non-transportation sources during daytime hours. In order to reduce and mitigate impacts, noise-generating construction activities would be limited to daytime hours, all equipment powered by internal combustion engines would be maintained in proper working order, and stationary noise-generating equipment would be located at the greatest distance practicable from sensitive land uses.

The Proposed Action includes development of new homes along Cypress Road and Sellers Avenue. These new residences would be close enough to the road that unmitigated traffic noise is expected to exceed the City's exterior standard of 65 dB in the adjacent yards, and the interior standard of 45 dB within the residences. The developer would address the issue by constructing noise barriers along Cypress Road to reduce exterior noise levels at units adjacent to the road to 65 dB or below. In addition, the developer would evaluate additional measures to

reduce interior noise levels at residences along the road to below the City's standard of 45 dB.

Cumulative Impacts

In addition to the Emerson property project, other actions in the area which could contribute to cumulative impacts include similar commercial/residential developments, the Contra Costa Canal Replacement Project, and the Dutch Slough Restoration Project.

Other Proposed and Approved Land Development Projects

There are numerous residential subdivisions and other land development projects in the area, including Delta Coves on Bethel Island, Summer Lakes South and North, the East Cypress Corridor, and the Baldocchi parcel. All of these, with the exception of Delta Coves and Summer Lakes, require CVP inclusion review.

Contra Costa Canal Replacement Project Contra Costa WD plans to encase the segment of the Canal from Marsh Creek to Sellers Avenue (including the portion directly to the north of the Emerson Property) in a pipeline, and install a flood isolation structure at the Rock Slough Headworks at the entrance to the Canal just downstream of Rock Slough. This would be the second segment of the unlined Canal that would be placed in a pipeline. Once the pipeline in this area is installed, the berms adjacent to the unlined Canal would be removed and the approximately 300-foot right-of-way would be graded flat. The applicant has agreed to contribute funding to this project as mitigation.

Dutch Slough Restoration Project The California Department of Water Resources (DWR) and the City have proposed the Dutch Slough Restoration Project, which would restore wetland and upland habitats for native fish and wildlife and include development of a City Community Park Project on a 1,166-acre property located to the north of the Emerson Property. The project would also provide public access, educational, and recreational opportunities along the shoreline. Construction activities, including levee grading and construction, utilities relocation, and marshplain grading would occur during the dry season from mid-April to mid-October and take at least two years to complete.

Water Resources

The Proposed Action, along with other planned residential and commercial developments in the area, would represent new demand on Diablo WD's water supply. However, Diablo WD and Oakley have already accounted for this additional demand, and infrastructure improvements are planned to accommodate it. No cumulative impacts to the water supply are anticipated beyond the individual developments' needs. The other major construction projects in the area, the Dutch Slough Restoration Project and Contra Costa Canal Replacement project, are not expected to increase demand on the water supply.

Development of the Emerson Property project and other nearby construction projects would have the potential to increase the sediment load to area waterways

during construction. However, each of these projects would be required to comply with mitigation measures to reduce impacts from land disturbance, including a SWPPP. These requirements are anticipated to adequately address water quality concerns during construction.

Following the initial construction period, the Dutch Slough Restoration Project and Contra Costa Canal Replacement Project are expected to be a net positive for water quality, through habitat restoration and protection of raw municipal water from external pollution sources. New commercial and residential developments can contribute to water quality degradation, however, as they can be sources of sediment, oils and litter. They also increase impervious area, which causes faster runoff and bypasses natural filtering processes. Contra Costa County regulates stormwater discharges from these areas and requires developers to incorporate stormwater control and improvement measures into their designs. The Proposed Action is within the scope of activities anticipated by this regulatory program, and is not expected to result in cumulative impacts beyond those already considered and evaluated.

Land Use

With respect to land use, the Emerson Property project, along with all known projects in the City of Oakley, would change the intensity of land uses in the City's Planning Area. However, the 2020 General Plan designates this area for urban development and anticipates this growth. All developments proposed and constructed within the City are reviewed for consistency with citywide land use controls and development standards during the course of the project review and approval process.

Biological Resources

Historically, a majority of the project site consisted of cultivated lands that were used for hay production. The rest of the project site consisted mostly of disturbed land, including dirt roadways, levees and berms, and areas around development such as the two houses, barns, and corrals. Three major land cover types formerly covered the project site which included ruderal grassland (21.4 acres), cropland (116.83 acres), and urban (two acres). The habitat found in the Phase 1 area was removed as a result of previous grading and trench construction by the developer. Part of the Phase 2 area was impacted by stockpiling of spoils from the Phase 1 grading, and by the construction of temporary dewatering fields, which were created on top of the existing fields using the existing levees and dirt berms. Species covered by the HCP that were considered to have been possibly onsite were the Western Burrowing Owl (*Athene cunicularia hypugaea*), Swainson's Hawk (*Buteo Swainsoni*), Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), and the giant garter snake (*Thamnophis gigas*). Buildings that were removed would have included potential bat roosting habitat, and other species may have been disturbed and their habitat lost during the work that occurred.

The developer had begun some of this work as of the date that a take certificate was issued for Phase 1 (October 29, 2013), pursuant to the section 10 Endangered

Species Act permit that was issued in association with the East Contra Costa County HCP/NCCP, and prior to Reclamation having completed its section 7 consultation with the Service. The HCP/NCCP required that certain measures be followed, with regard to surveys, monitoring, and minimization of impacts. The Service gave special permission to deviate from the usual timing restriction for work in giant garter snake habitat on October 29, 2013, as long as additional measures were implemented.

Contra Costa WD plans to encase the Canal segment directly to the north of the Emerson Ranch parcel in a pipeline and install a flood isolation structure at the Rock Slough Headworks just downstream of Rock Slough at the entrance of the Canal. The Dutch Slough Restoration Project would restore wetland and upland habitats and provide public access to a 1,166-acre property owned by DWR. Reclamation has approved multiple boundary changes to include lands into Contra Costa WD's service area. Although Reclamation's approval for boundary changes and delivery of CVP water deliveries to planned development projects may contribute to the cumulative decline of habitats and biological resources, each proposed inclusion and development project undergoes separate environmental reviews and appropriate consultations in accordance with applicable laws, regulations and permits. Measures are imposed to avoid or offset the loss and decline of habitats, fish, wildlife and plants. Furthermore, the East Contra Costa County HCP/NCCP has been expressly developed and designed to mitigate the cumulative impacts from development in the eastern portion of the county.

In October 1992 the Central Valley Project Improvement Act (CVPIA) was passed which mandated changes in the management of the CVP, particularly for the protection, restoration, and enhancement of fish and wildlife. Under the authority of the CVPIA, Reclamation has provided funding to expand lands conserved under the East Contra Costa County HCP/NCCP, above and beyond what has been set aside as mitigation for various development projects.

Cultural Resources

The ongoing development of agricultural lands in eastern Contra Costa County has the potential to result in cumulative impacts to significant cultural resources eligible for the National Register, assuming such properties are present. Any future proposed changes to water delivery area, or the means of such delivery, however, that require Reclamation approval would be subject to separate cultural resources Section 106 reviews and consultations as applicable. In such cases where significant cultural resources (i.e., historic properties) would be impacted by Reclamation's action, such impacts would be mitigated or otherwise resolved through the Section 106 process.

Indian Trust Assets

The Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area.

Indian Sacred Sites

The Proposed Action would not impact Indian Sacred Sites as there are no known Indian Sacred Sites in the project area. No direct or indirect impacts to Indian Sacred Sites would occur as a result of the Proposed Action.

Socioeconomic Resources

With respect to socioeconomic resources, population, job, and housing growth in Contra Costa County are expected to continue through year 2020. Reclamation's approval of the change in Contra Costa WD's service area boundary and delivery of CVP water to the Emerson Property would contribute to the trend for increased socioeconomic resources in the region.

Environmental Justice

Regarding environmental justice, the Proposed Action is anticipated to provide short-term employment opportunities for construction laborers. Since construction laborers often come from disadvantaged communities, this is a benefit to environmental justice populations. The cumulative effect of the Proposed Action, combined with other similar construction projects in the area, is also expected to be a benefit to those communities.

Air Quality

Approval of the inclusion request would allow Contra Costa WD to supply CVP water to the Emerson Property. The development of a new subdivision on the property would result in short-term, localized air emissions during construction. There would also be long-term emissions from the new subdivision, from vehicle traffic as well as miscellaneous residential sources (lawnmowers, air conditioning units, etc.).

The City's EIR included an estimate of construction emissions and a comparison to the BAAQMD's thresholds of significance. All criteria pollutant emissions as a result of construction are anticipated to be less than the thresholds of significance. Further, the developer would be required to comply with BAAQMD's most current standards for controlling fugitive dust on construction sites.

Although construction emissions are not expected to exceed thresholds of significance, the City estimates that long-term annual emissions from the new development would exceed BAAQMD's thresholds of significance for reactive organic gases, oxides of nitrogen and particulate matter. Therefore the City would require the developer to incorporate mitigation measures pursuant to BAAQMD guidance. These include, but would not be limited to, such measures as using energy-efficient appliances, restricting the types of fireplaces which may be installed, and incorporating design features which encourage travel on foot, by bicycle, or transit.

Global Climate

While the GHG emissions from one project would not be substantial enough to adversely affect the global climate, cumulative GHG emissions from multiple projects and sources throughout the world could result in an adverse impact with respect to climate change. GHG control strategies continue to develop over time, through regulation and technological advances.

Traffic

The Emerson Property project, along with other proposed and planned construction projects in the area, would increase short-term traffic and congestion in the City's Planning Area and nearby unincorporated areas. It is possible that construction periods for some of these projects could overlap, creating a potential for cumulative impacts. The Traffic Control Plan for the proposed development would take into account the potential for overlapping construction periods and conflicting construction traffic.

Noise

With respect to cumulative noise impacts, other construction in the area could be under underway concurrently with work on the Emerson property, and could take place adjacent to the same noise-sensitive receivers. In particular, residents in the northeast corner of the Cypress Grove subdivision could receive noise from the Contra Costa Canal Replacement, to the north, and the Dutch Slough Restoration project, on the north side of the Canal, in addition to the Proposed Action. However, all construction projects would be subject to the same restrictions regarding proper equipment maintenance and work hours. Also, each of the individual projects covers a large land area, with a range of construction activities. It is unlikely that particularly noisy work for all three projects would happen to be concentrated at one location for any extended period of time. Therefore the potential for cumulative impacts is limited.