

Appendix E: Potential Cumulative Actions

The following past, present and reasonably foreseeable projects were included in the cumulative effects analysis documented in Chapter V.

Reasonably Foreseeable Actions

Agency Name: National Park Service

Project Name: Curry Village and East Yosemite Valley Campgrounds Improvements

Description: A site plan is being developed for east Yosemite Valley to implement actions called for in the *Yosemite Valley Plan*. The project area generally extends south of the Merced River from the eastern boundary of Housekeeping Camp to Happy Isles, and encompasses the area along Tenaya Creek for proposed campsites. The site plan will ensure that all related actions proposed for the east Valley are implemented in a logical, feasible, and cost-effective manner. Most of the actions will not begin for several years, but in the meantime, the site plan will result in a more detailed picture of how and in what order the projects in the east Valley should be implemented. Following are examples of the many actions identified in the *Yosemite Valley Plan* for east Yosemite Valley:

- Reconfiguring campgrounds at Upper and Lower Pines
- Adding campsites at the new South Camp and Tenaya Creek Campgrounds
- Removing Curry Orchard and restoring the area to natural conditions
- Constructing new visitor cabins-with-bath in Curry Village
- Relocating the Curry Village ice rink
- Providing new and reconfigured food service and concession facilities at Curry Village
- Relocating the concessioner stable
- Converting Southside Drive to two-way traffic
- Constructing a fire station in the Curry Village area

A Finding of No Significant Impact was issued in February 2004.

Agency Name: National Park Service

Project Name: El Portal Concept Plan

Description: The *Yosemite Valley Plan* calls for relocating employee housing, administrative offices, and parking from Yosemite Valley to El Portal. The Concept Plan will provide a comprehensive site plan for the specific layout and design of administrative facilities, including employee housing, offices, and parking areas in the El Portal area. This plan will address the specific functions and spatial requirements of the facilities that the *Yosemite Valley Plan* recommends to be located in El Portal. Although the *Yosemite Valley Plan* generally outlined the facilities that would be relocated to El Portal, it did not provide specific details for each facility or

for the interrelationships between existing, redeveloped, and new facilities. The Concept Plan would evaluate these interrelationships and determine the most efficient use of the limited developable areas in El Portal.

Housing development in El Portal would include the relocation of some beds already in El Portal but within the 100-year flood zone; the relocation of National Park Service and concessioner beds from the Valley, Arch Rock, and Cascades; and the addition of new beds to accommodate current unmet needs and provide for future growth. Currently 247 beds exist in El Portal; the plan calls for 1,037.

In addition, National Park Service and concessioner administrative offices will be relocated out of the Valley. National Park Service headquarters and administrative functions would be relocated and combined with existing National Park Service operations facilities at Railroad Flat, in the western portion of El Portal. Depending on land development constraints in El Portal or other considerations, the relocated headquarter functions for both the National Park Service and concessioner could be relocated to neighboring communities.

The final area of potential development in El Portal, as outlined for the Concept Plan in the *Yosemite Valley Plan*, is the construction of parking areas. Employees who live west of El Portal along the Highway 140 corridor and work in Yosemite Valley could drive to a parking area in El Portal and take employee shuttles into the park. Approximately 60 parking spaces would be provided at El Portal for this purpose.

The development of an Environmental Impact Statement is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: El Portal Old Wastewater Treatment Facility Removal

This project calls for the removal of all the existing structures and the rehabilitation of the site to pre-construction conditions. Rather than remove all the concrete footings, the excavation and demolition will concentrate on removing everything to below the finished grade and breaking up all remaining concrete to allow for surface water penetration. The project will entail demolishing and removing five concrete structures consisting of 169 tons of concrete, 345 tons of asphalt walks and roads, 550 feet of cyclone fencing, associated appurtenances, archeological monitoring and site rehabilitation. Archeological mitigation, monitoring and exhumation of the culturally sensitive human remains and artifacts occurred prior to the construction of these facilities in 1962.

This project is scheduled to commence in the summer of 2006. All aspects of this project will occur compliant with a final Merced Wild and Scenic River Comprehensive Management Plan.

Agency Name: National Park Service

Project Name: El Portal Road Improvements Project (Segment D)

Description: As part of the road improvements, El Portal Road between Pohono Bridge and the intersection of the Big Oak Flat Road with the El Portal Road (at the west end of Yosemite Valley,

also known as Segment D) would be improved. This segment of road has two narrow travel lanes, each 9.5 feet wide. Subsequent to the January 1997 flood, this road failed east of the Big Oak Flat/El Portal Road intersection and was repaired temporarily. The El Portal Road Improvements Project would widen the road to 11-foot lanes and stabilize the road shoulder adjacent to the Merced River. Road improvements would be designed to improve safety and minimize the chance of roadway failures in the future.

The development of an Environmental Impact Statement is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: Environmental Education Campus Development Program

Description: In 1971, Yosemite National Park developed a partnership with Yosemite Institute (a nonprofit organization) to administer the National Park Service's environmental education campus. The existing facility is located at Crane Flat, located off Tioga Road. The redevelopment of the environmental education campus has been proposed to enable the center to accommodate participants at a price structure affordable to a more diverse range of students.

The National Park Service and Yosemite Institute have initiated conceptual designs for the proposed action. One concept is to redevelop and expand the facilities at Crane Flat from the existing campus of approximately 7,000 square feet of dormitory and classroom space, able to accommodate up to 76 participants and 3 staff, to a facility of approximately 52,000 square feet, accommodating approximately 200-300 participants and 10-20 staff. Another concept includes retention of historic structures onsite and redevelopment of the remainder of the campus.

If the campus at Crane Flat is redeveloped, construction and operation of the facility has potential to affect the following types of resources:

- Water supply and wastewater disposal
- Local vegetation and wildlife, such as the great gray owl and nearby meadows
- Historic setting and structures
- Visitor use patterns, including use of the Tuolumne Grove of Giant Sequoias and nearby trails
- Local air patterns such as construction-generated dust and noise
- Transportation, including increased use of Tioga Road and potential conflict of students and vehicles along Tioga Road

Preparation of the Environmental Impact Statement is currently underway and the Record of Decision is expected to be signed in 2006.

Agency Name: National Park Service

Project Name: Multi-Use Trail to West Yosemite Valley

Description: Approximately 80% of Yosemite's 4 million visitors per year stop at Yosemite Valley destinations. Bicyclists, hikers, visitors using wheelchairs, and those with strollers find that the multi-use paved trail in the east Valley ends abruptly near Swinging Bridge. To continue the trail to west Valley destinations (such as El Capitan or Bridalveil Fall), users must either confront automobile traffic by traveling along the edge of a busy roadway—a potentially life-threatening safety hazard—or return to private vehicles, ending an important aspect of their recreational experience and adding to traffic noise, emissions and congestion. This project would provide an accessible trail, separate from automobile traffic, to allow convenient, safe, accessible, and enjoyable access to destinations in the west Valley. The project would be accomplished as a shared cost partnership between the National Park Service and the nonprofit Yosemite Fund cooperating association.

The project would involve the construction of 4.5 miles of new multi-use paved, wheelchair-accessible trail to points of interest in the west end of Yosemite Valley. Work would include constructing a 3-mile section of paved trail adjacent to Southside Drive from Swinging Bridge to El Capitan Bridge, and a 1.5-mile section along the roadway from El Capitan Bridge to Bridalveil Fall. The project would also include installation of 23,760 linear feet of conduit under the trail to accommodate future communication lines.

The environmental compliance process is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: Northside-Southside Drive Repaving

Description: Rehabilitation of Valley roadways is proposed to repair and resurface existing roadway pavement and drainage facilities. The project would not widen or realign the existing roadway. Pavement rehabilitation likely will involve some sort of in-place recycling of the existing deteriorated pavement, followed by the placement of new asphalt paving. Areas with soft or poorly draining subgrade may be excavated and replaced with better foundation materials. All drainage culverts will be examined for condition, capacity, and proper location. Culverts found to be in poor condition, undersized, and/or poorly located will be replaced in improved locations with properly sized pipes. As necessary, the drainage channels to and downstream of existing culverts will be examined for potential improvements. Existing stone masonry at culvert headwalls and outlets may be salvaged and reused. Granite and reinforced concrete curb will be installed in many locations where off-road parking is adversely affecting the road shoulder and adjacent areas. In some areas, existing barriers will be replaced with curbs. Some existing gravel turnouts would be paved and curb installed to contain the parking area.

The proposed pavement rehabilitation work likely can be accomplished within the existing disturbed road corridor. However, culvert relocation or rehabilitation and the improvement of drainage channels to existing culverts may require disturbance of some new areas.

The environmental compliance process is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: **Out-of-Valley Campground Plan (Parkwide Campground Study)**

Description: The Parkwide Campground Study, conducted in 2001-2002, looked at options for both building new and expanding existing park campgrounds to account for campsites lost in Yosemite Valley during the January 1997 flood. The report has been transmitted to Congress and is currently under review. Several options were considered.

The first option is the redevelopment of several “infill” sites, which involves the better use of space within existing campgrounds to accommodate more visitors. The study also assessed the expansion of existing sites as well as the development of new sites; if all of these plans move forward, the study indicates that 788 new campsites will be created. The following areas were assessed for the proposed plans:

- Infill Sites: Bridalveil Creek, Porcupine Flat, Tamarack Flat, Tuolumne Meadows, Wawona, Yosemite Creek
- Expanded Sites: Crane Flat, Hodgdon Meadow, White Wolf
- New Sites: Foresta, Gaylor Pit, Grouse Creek, Henness Ridge, Mather Station, South Entrance

The implementation of any of the campground development listed above would include the mitigation of impacts to natural and cultural resources.

The environmental compliance process is scheduled to begin in 2006.

Agency Name: National Park Service

Project Name: **Parkwide Data Communications**

Description: This project has been developed to engineer and build a Communications Data Network using current technology to employ a single backbone hybrid system throughout Yosemite to maximize equipment use and fulfill the park’s needs. The network would be used to pipeline the transfer of computer LAN data, radio communications, security and safety video systems, telephony, burglar/intrusion and fire alarm systems, traffic collection data, and telemetry throughout Yosemite on one system instead of separate, costly systems. This hybrid system would use industry standard technology, thereby maximizing bandwidth and speed to make a more efficient communication infrastructure.

The project will initially involve a frequency spectrum study to determine the requirements to implement a Communications Data Network. This study would recognize the target area of coverage for microwave technology and determine the next steps and costs associated with implementing a hybrid Communications Data Network throughout Yosemite National Park.

The environmental compliance process is due to begin in 2005

Agency Name: National Park Service

Project Name: **Red Peak Pass Trail Rehabilitation**

Description: This project will reconstruct the trail from Red Peak Pass to the Triple Peak Fork of the Merced River. Work will include rehabilitation of rock retaining wall, rip-rap tread, water breaks, terrace steps, and restoration of meadow rutting.

This project is expected to begin in 2006.

Agency Name: National Park Service

Project Name: **Restore Riverine Habitat at the Sand Pit on the Merced River**

Description: The National Park Service developed the Sand Pit along the Merced River as a catchment basin to capture sand for icy roads in Yosemite National Park. Development of the 20-acre site effectively altered the former braided river in the El Portal Administrative Site. The National Park Service abandoned use of the pit after heavy damage from the January 1997 flood, but the site topography and vegetation remains highly degraded.

The Sand Pit is located in highly valued riparian habitat within the bed and banks of a Wild and Scenic River. This site is particularly valued because it contains riparian habitat below 3,300 feet, is potential habitat for federal and state-listed species, and lies along a California State Scenic Highway. The site has been designated a conservation area for the federally listed elderberry beetle. The site supports one State Rare plant.

The goal of this project is to restore natural riverine functions and processes at the Sand Pit and establish riparian vegetation and riverine scenery in the degraded site. The National Park Service would remove imported fill and restore natural hydrologic pathways. The well on the site would remain.

The project is scheduled to begin in 2007.

Agency Name: National Park Service

Project Name: **Tuolumne Wild and Scenic River Comprehensive Management Plan**

Description: The development of the Tuolumne Wild and Scenic River Comprehensive Management Plan will bring the park into compliance with the Wild and Scenic Rivers Act, and can be used to guide actions and evaluate the potential impacts of proposed improvement projects within the river corridor. In addition, the watershed on the Tuolumne Wild and Scenic River covers over 50% of Yosemite's backcountry areas and wilderness. This plan would be a comprehensive tool for watershed planning and management of sensitive areas within the Tuolumne River watershed. In addition, this plan would include much needed natural and

cultural data that have not been previously compiled for the river corridor and its watershed. These data would be used to create effective and modern management tools such as river protection overlays and much needed compliance necessary for managing resources and visitor use in the entire Tuolumne Meadows area as well as the Tuolumne River corridor. The plan would also be an important tool to examine many outstanding issues with the complicated management of the Hetch Hetchy Reservoir, including water quality management and watershed issues with the City of San Francisco.

The development of the Tuolumne Wild and Scenic River Management Plan Environmental Impact Statement is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: **Tuolumne Meadows Concept Plan**

Description: The Tuolumne Meadows, at an elevation of 8,600 feet, is the Sierra's largest subalpine meadow. Current facilities in the Tuolumne Meadows area include a 304-site campground, a visitor center, a service station, a 104-bed lodge, food services, government and concession stable operations, employee housing, a wastewater treatment plant, and several administrative buildings. These facilities support approximately 5,000 park visitors and 200 park staff daily from May through October. Although improvement or relocation has been considered for many of these facilities, there is no comprehensive plan that looks at the entire Tuolumne Meadows area as a whole and determines the desired extent and location of development. A Concept Plan will define management objectives, including resource protection goals for the entire area, and it will identify boundaries for specific types of development. This will allow implementation of management objectives and appropriate facility construction as incremental funding becomes available.

The environmental compliance process for the Tuolumne Meadows Concept Plan is scheduled to begin in 2006.

Agency Name: National Park Service

Project Name: **Update to the Yosemite Wilderness Management Plan**

Description: The National Park Service is updating the 1989 *Yosemite Wilderness Management Plan*. The objective associated with updating the plan is to assess current conditions and trends, in order to provide stewardship direction. This plan will guide park operations for the successful management of Yosemite's designated Wilderness, which comprises almost 95 percent of the park. The plan will address land management issues within the designated Wilderness, including visitor use, vegetation associations, air resources, noise issues, watersheds, soils, cultural landscapes, and other natural, cultural, and social resource variables.

The development of an Environmental Impact Statement is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: **Visitor Use and Floodplain Restoration Program**

Description: The ecological restoration program seeks to restore natural processes to ecosystems so that portions of Yosemite Valley can recover from past human development and activities. A plan is being developed for the ecological restoration of the Upper River, Lower River, North Pines, and the northwest end of Lower Pines campgrounds; Group Camp, Backpackers Camp; Housekeeping Camp within the River Protection Overlay of the Merced River; and The Ahwahnee tennis court in Yosemite Valley. As part of this project, surveys are being conducted for archeological sites; the history of human disturbance in the area is being investigated; the former distribution of meadow, wetland, and forest communities is being investigated; a restoration prescription is being developed that recognizes the retention, modification, or removal of bridges, bicycle paths, riprap, and roads; the necessity and extent of revegetation is being determined; a revegetation strategy is being developed; and monitoring of river channel morphology is being conducted.

Ecological restoration may include:

- Removal of imported fill material
- Removal of abandoned roads and infrastructure
- Re-establishment of natural contours on the land
- Restoration of natural surface and groundwater movement
- Replanting of native vegetation
- Removal of non-native plant and animal species
- Restoration of carbon and nitrogen cycles in degraded soils

The development of an Environmental Assessment is scheduled to begin in 2005.

Agency Name: National Park Service

Project Name: **Wawona Campground Rehabilitation**

Description: The purpose of this project is to implement the *General Management Plan* goal to rehabilitate the Wawona Campground. Preliminary design plan, construction drawings, and bid documents will include the following actions: (a) rehabilitate the campground entrance and loop road and individual campsite spurs; (b) retrofit campsites and restrooms to meet accessibility standards; (c) install low-flow toilet, replace toilet partitions, repaint, install energy efficient lights and heat, replace composition roofs with metal, and insulate and winterize the restrooms in loops A and B; (d) construct showers; (e) replace exterior privacy partitions; (f) reconstruct the amphitheater; (g) remove septic tanks and leach fields; (h) extend sewer, electrical service, and telephone 1.5 miles; (i) replace existing signs with the new park sign system; and (j) prepare a vegetation management plan that includes shoreline protection and re-establishes privacy and shade in the campground.

Agency Name: National Park Service

Project Name: Yosemite Lodge Area Redevelopment

Description: This project is tiered off the *Yosemite Valley Plan*. The project collectively known as the Yosemite Lodge Area Redevelopment includes four separate actions as described in the *General Management Plan* and the *Yosemite Valley Plan*: redevelopment of Yosemite Lodge, redesign of Camp 4, relocation of Northside Drive, and design of the Indian Cultural Center (this action is described further as a separate project below). All actions occur in the Yosemite Lodge area of Yosemite Valley and include the following:

Yosemite Lodge will be changed from a motel type of experience to one more connected to a national park lodge experience in Yosemite Valley.

- Yosemite Lodge facilities in the river protection zone and the floodplain will be removed.
- Camp 4 will be redesigned to accommodate the expansion and improvements called for in the *Yosemite Valley Plan*.
- Northside Drive in the Yosemite Lodge and Camp 4 area will be relocated south of the lodge to reduce conflicts between vehicles and pedestrians and to provide safer pedestrian access between the lodge and the Lower Yosemite Fall area.
- Through a cooperative agreement with the American Indian Council of Mariposa County, Inc., an Indian Cultural Center will be established at the site of the last historically occupied Indian village in Yosemite Valley (just west of Camp 4 and Yosemite Lodge). See the project description below.

An Environmental Assessment was prepared for this project in September 2003 and a Finding of No Significant Impact was issued in February 2004.

Agency Name: American Indian Council of Mariposa County, Inc. (Southern Sierra Miwuk Nation)

Project Name: Indian Cultural Center

Description: An Indian Cultural Center would be established by the American Indian Council of Mariposa County, Inc. (Southern Sierra Miwuk Nation) at the site of the last-occupied Indian village in Yosemite Valley (west of Camp 4). This center would provide a location for culturally associated Indian people to conduct traditional ceremonies and to practice and teach techniques of traditional lifeways. While the center would be open to the public, access might be limited during special ceremonies. Some public interpretation would occur, but this cultural center would not replace the primary educational function of the current Indian Village of Ahwahnee at Yosemite Village.

Facilities at the Indian Cultural Center would consist of structures and landscape features typical of an Indian village from the mid- to late-19th century. One large, partly subterranean ceremonial roundhouse and a smaller sweatlodge would be constructed. Approximately 15 cedar bark

umachas (conical houses) would be built in the vicinity of the roundhouse and sweatlodge. Plants important for food, basketry, and medicinal uses may be grown. Existing archeological features, such as mortar rocks, would remain in place and be incorporated into the village design. The last extant structure from the original village, a small cabin (the former Westley and Alice Wilson home) currently being used as a National Park Service office, would be moved back to the village and adaptively reused as the cultural center office. A new kitchen and restroom facility would be constructed. Utilities (water, sewer, propane, unimproved road access, and electrical service) would be provided. Screening would be established where necessary to visually separate the cultural center and Northside Drive, Yosemite Lodge, Camp 4, and the Valley Loop Trail. The Valley Loop Trail could be relocated to a route south of the cultural center to minimize intrusions. Overnight parking for scheduled activities would be provided at the Indian Cultural Center or other administrative areas.

The environmental compliance for this project was finished in September 2003. The American Indian Council of Mariposa County, Inc. is presently preparing fundraising plans and activities to support this project.

Agency Name: National Park Service

Project Name: Yosemite Village Interim Parking Improvements

Description: In keeping with the actions outlined in the *Yosemite Valley Plan*, an interim project is needed to improve the visitor experience and park operations at the Yosemite Village main day-visitor parking area. The parking area is located south of Yosemite Village and east of Sentinel Bridge, between the Merced River and Northside Drive. This area has hosted a variety of uses over the past 100 years, and has historically been referred to as Camp 6.

The project will include some or all of the following components:

- Parking for day visitors, including recreational vehicles and disabled persons
- The relocation of tour bus loading and unloading facilities
- Roadway realignments to improve vehicular and pedestrian traffic circulation and safety
- Pedestrian/bicycle paths to improve pedestrian/bicycle traffic circulation and safety
- Valley shuttle bus service operations and facilities
- Interpretation facilities, including wayfinding signs
- Other visitor facilities, such as restrooms

The development of an Environmental Assessment is scheduled to begin in 2005.

Present Actions

Agency Name: National Park Service

Project Name: Cook's Meadow Ecological Restoration

Description: This project is restoring a dynamic and diverse wetland ecosystem. The Cook's Meadow restoration project involves the following actions:

- Filling four drainage ditches created by early Euro-American settlers
- Removing a raised, abandoned roadbed and a trail that bisected the meadow
- Reconstructing the trail on an elevated boardwalk that now allows water to flow freely and reduces foot traffic on sensitive meadow plants
- Installing culverts under Sentinel Road to direct runoff into the meadow and restore the natural flow of water from the Merced River during seasonal periods of high water
- Reducing non-native plant species encroaching on native species by using manual, mechanical, and chemical control methods

Project completion is expected at the end of 2005.

Agency Name: National Park Service

Project Name: Curry Village Employee Housing

Description: This project includes the design and construction of new employee housing and related facilities to accommodate approximately 217 concessioner employees in the area west of Curry Village in Yosemite Valley. This housing will replace concessioner housing lost in the January 1997 flood. The employee housing units have been designed in accordance with the character of the area, with particular focus on the Curry Village Historic District. The scope of this housing project includes providing parking and access, an employee wellness center, concessioner housing, management offices, maintenance facilities, postal facilities, and housing-related storage.

The compliance for this project was completed in 2004 and construction is expected to begin in 2005.

Agency Name: National Park Service

Project Name: Happy Isles Dam Removal

Description: The Merced River supports one of the last unaltered, high-elevation aquatic ecosystems in the Sierra Nevada. Several small impoundments exist on the river that degrade the quality of the quality of the aquatic systems and depreciate its integrity as a Wild and Scenic River. The Happy Isles Dam impoundment, located at the eastern end of Yosemite Valley, has been abandoned since the mid-1980s. The remaining infrastructure consists of a low rock and concrete

dam, two steel-reinforced concrete and iron diversion gates, numerous pipes above and below ground near the dam, and an 8-foot by 12-foot granite powerhouse foundation. The dam and diversion gates cause a large eddy and scour pool (100 feet wide by 15 to 20 feet deep) directly upstream of the obstruction, which dramatically alters local hydrology, water chemistry, and ecology. The project consists of removing the Happy Isles dam and associated infrastructure and revegetating the riverbanks to prevent post-project bank erosion.

This project is currently ongoing.

Agency Name: National Park Service

Project Name: **Happy Isles to Vernal Fall Trail Reconstruction**

Description: This project proposes to reconstruct 5,400 linear feet of the Vernal Fall Trail from Happy Isles to the base of the Mist Trail stairs. Actions include constructing an average tread width of seven feet, rebuilding trail walls, redistributing old pavement as a sub-base, and resurfacing. On steeper sections of the trail, improved traction will be provided for pedestrians. A functioning drainage system will be established in the trail corridor by paving water breaks and constructing rock drainages to channel water away from the trail.

Project completion is expected in November 2005.

Agency Name: National Park Service

Project Name: **Lower Yosemite Fall Project**

Description: This project consists of improving and rehabilitating the physical infrastructure at the 56-acre Lower Yosemite Fall area. The project work includes rebuilding/rehabilitating trails; removing several trail segments; rebuilding/rehabilitating five pedestrian bridges; constructing one new pedestrian bridge; removing one pedestrian bridge; removing the existing parking area and revegetating it to natural conditions; constructing a new shuttle bus stop; replacing/relocating the restroom; creating new access points; fabricating and installing new directional signs; creating a meeting area for groups; restoring portions of forest and creekside habitat to natural conditions; installing amenities such as bike racks, picnic tables, public telephones, trash cans, and wayfinding signs; enlarging the viewing areas near the base of the fall; and providing educational exhibits.

This improvement project will enhance a world-class visitor experience, create a loop trail system that is fully accessible to people with mobility impairments, reduce the perception of crowding and congestion at main views and along the trail, and improve the hydrology of the braided stream system by replacing the narrow bridges that replace the natural stream flow.

To address removal of the tour bus loading/unloading and parking area from the Lower Yosemite Fall area, replacement loading/unloading and parking spaces will be provided for tour buses. Long-term tour bus loading and unloading would occur at the future new transit center in Yosemite Village.

Project completion is expected in 2005.

Agency Name: Mariposa County

Project Name: Mariposa County General Plan (Update)

Description: The Draft Mariposa County General Plan will update countywide zoning ordinances and related implementing documents. This update is intended to allow Mariposa County to comply with current California law. Specifically, it is intended that this would allow Mariposa County to comply with changes to state law that have changed since the 1980 General Plan was adopted. This update will follow established public involvement protocol and may respond to countywide land-use issues.

The *Draft Mariposa County General Plan* was most recently updated in January 2004 and is projected for completion in January 2005.

Agency Name: National Park Service

Project Name: Parkwide Invasive Plant Management Plan

Description: Today there are over 150 non-native plant species in Yosemite National Park, which is about 10% of the park's flora. Of these, 28 species are listed for control by the U.S. Department of Agriculture, California Department of Food and Agriculture, or California Exotic Pest Plant Council. Species targeted for control in Yosemite include bull thistle, mullein, yellow star thistle, spotted knapweed, perennial pepperweed, purple vetch, rose and burr clovers, Himalayan blackberry, white and yellow sweetclover, non-native wildflowers, and escaped landscaping plants such as foxglove, ox-eye daisy, pink mullein, French broom, tree-of-heaven, and black locust.

The current control program includes using Geographic Positioning System (GPS) technology to map plant populations. Crews then remove plants using a variety of techniques, including hand-pulling. Treated areas are photographed and re-visited each year to assess the results and provide follow-up treatment.

The proposed Parkwide Invasive Plant Management Plan will define a set of comprehensive programs, including the following:

- Education and focused research
- Prioritized prevention and control efforts using a variety of techniques and appropriate mitigation measures
- Systematic monitoring and documentation of invasive plant status and the results of management efforts
- Restoration of ecosystems altered by invasive plants

Control methods being considered include some combination of the following: hand-pulling or using various machines to try and remove plants; releasing predatory insects or fungus to attack plants; educating users and staff about preventative measures; and using chemical treatments derived from natural products like vinegar, or manufactured chemicals like glysohate. Program goals include eradicating (or at least controlling) invasive plant species; preventing new invasions; restoring and maintaining desirable plant communities and healthy ecosystems; enhancing the visitor experience; and educating park staff, partners, and users.

The plan should be completed, and an environmental assessment produced for public review by fall of 2005.

Agency Name: National Park Service

Project Name: **Replacement/Rehabilitation of Yosemite Valley Sewer Line**

Description: This project includes the design and repair of the Yosemite Creek Lift Station Sewer Force Main under Northside Drive from Yosemite Creek Lift Station to the Valley Woodlot, a distance of approximately 4 miles. This project provides for the excavation and removal of the existing pipeline and replacement with high-density polyethylene pipe within the same trench. All appurtenances, valves, and drains would be replaced. In addition, this project includes repair and/or replacement of 29 sanitary sewer manholes, completion of 600 feet of slip lining, and spot repairs of the gravity trunk main in the El Portal area. It includes temporarily bypassing the existing alignment and reconstructing all drains and culvert crossings.

Project implementation is expected in early 2005.

Agency Name: National Park Service

Project Name: **Resources Management Building**

Description: The National Park Service proposes to construct an approximately 8,500 square-foot, two-story building adjacent to the existing maintenance/warehouse complex and to make improvements to a parking lot at Railroad Flat in the El Portal Administrative Site. The new building will house National Park Service resources management and science staff.

Project implementation began in December 2004.

Agency Name: National Park Service

Project Name: **South Fork Bridge Replacement**

Description: The South Fork Bridge spans the South Fork of the Merced River and is located on the Wawona Road (Highway 41) within the Wawona developed area. The original triple-span bridge is 134-feet-long and 29-feet-wide with two 11-foot-wide travel lanes, and consists of steel

girders, a laminated timber deck, and an asphalt surface. The bridge is supported by two unreinforced masonry/cobble abutments and two reinforced instream piers. Damage over the years led to the closure of the bridge in 1998 after a temporary bypass bridge was installed to serve in the interim until the bridge is replaced. This bypass bridge has served beyond its original intent.

The bridge piers and abutments are currently obstructing the flow on a Wild and Scenic River. The proposed single-span structure would improve the free-flowing condition on the South Fork of the Merced River. In addition, one-third of park users travel to the park via Highway 41 and Wawona Road, thereby making the replacement an important component of Yosemite National Park's transportation concerns.

Construction on the bridge project is expected to begin in the spring of 2005.

Agency Name: National Park Service

Project Name: Utilities Master Plan/East Yosemite Valley Utilities Improvement Plan

Description: The existing utility infrastructure serving Yosemite Valley was identified in the *Yosemite Valley Plan* as a potential problem due to its age, condition, inadequate capacity, inaccessibility to future facilities, and inappropriate location in environmentally sensitive areas. The National Park Service completed a *Utilities Master Plan* for the east Yosemite Valley in 2003. This plan incorporated information on existing utility conditions and required repairs identified in the *Yosemite Valley Sanitary Sewer Capital Improvement Plan*, completed in 2002. The *Utilities Master Plan* assessed the current condition of utilities (water, wastewater, electric, and communications) in the Valley and the future Valley utility needs based on facilities proposed in the *Yosemite Valley Plan*. The *Utilities Master Plan* was developed to allow efficient relocation and upgrading of utility systems to provide for utility needs while reducing long-term environmental impacts from utility repair and maintenance activities.

An Environmental Assessment on the *Utilities Master Plan* was completed in June 2003 and a FONSI was signed in October 2003. Implementation of the utility improvements will occur in three phases over 10 years. Construction of phase 1 of the improvements is expected to start in 2005.

Agency Name: Mariposa County

Project Name: Yosemite Motels Expansion

Description: This project site is located along the north and south side of Highway 140 at the existing Yosemite View Lodge development, within the El Portal Town Planning Area. Conditional Use Permit #268 was approved by Mariposa County on May 5, 2000, for a three-story, 63-unit motel and a 2,417-square-foot Activity/Guide Center. Access to the motel and Activity/Guide Center would be from the south side of Highway 140.

Construction began in the fall of 2004.

Agency Name: National Park Service

Project Name: Yosemite Valley Shuttle Bus Procurement

Description: As called for in the *Yosemite Valley Plan*, a new fleet of low-emissions, low noise, fuel-efficient shuttle buses have been purchased to replace the existing fleet of 1986 diesel buses currently servicing Yosemite Valley. The recommendation of hybrid electric-diesel buses was based on findings that they result in 50 to 60% fewer emissions than conventional diesel buses, with an improvement in fuel economy and noticeably quieter operations.

The new buses will be in use in 2005.

Agency Name: National Park Service

Project Name: Yosemite Valley Shuttle Bus Stop Improvements

Description: This project consists of the preparation of preliminary design plans, environmental compliance documents, and construction drawings; the construction of six 10 by 80-foot concrete braking pads; and the rehabilitation or replacement of 94,000 square feet of asphalt road approaches.

Construction is expected to begin in late 2004 or early 2005.

Past Actions

Agency Name: National Park Service

Project Name: Cascades Housing Removal

Description: The Cascades area houses became cost prohibitive to maintain because of substandard construction and inadequate site development (drainage) and non-compliance to construction codes. The houses contained asbestos and lead paint concerns; abatement costs would have been prohibitive. Removal of these structures was deemed compatible with park values, and the *General Management Plan* targeted these structures for removal. While the houses were nominated for the Historic Register, they were approved for removal. The removal included the complete removal of structures and foundations, while significant historical components were saved.

Five housing units were removed and area vegetation was restored. This project was completed in 2004.

Agency Name: National Park Service

Project Name: **Cascades Diversion Dam Removal**

Description: The Cascades Diversion Dam was located on the main stem of the Merced River at the far west end of Yosemite Valley. The dam was a timber “crib” structure with associated concrete abutments. Removing the dam was part of the overall intent of the Merced River Plan and *Yosemite Valley Plan* to restore free-flowing conditions to the Merced Wild and Scenic River. In its deteriorated condition, the dam presented a significant public health and safety hazard due to the potential for uncontrolled collapse. Cascades Diversion Dam was located adjacent to El Portal Road.

Removal of the structure and related facilities was completed in 2004.

Agency Name: National Park Service

Project Name: **El Portal Road Improvements Project, Segments A, B, and C**

Description: The El Portal Road Improvements Project for Segments A, B, and C was conducted to stabilize the roadway, reduce the likelihood of future road closures associated with flood events, facilitate regional transportation, and improve the safety of the road. The project was implemented in response to the needs of Yosemite, as well as ongoing and reasonably foreseeable future changes in facilities, services, and user and park use. Being only one of three roadways providing access to Yosemite Valley, El Portal Road handles a quarter of the traffic to Yosemite National Park. The El Portal Road is sometimes the only access to Yosemite Valley during the winter.

The severe flooding that occurred from January 1 to 3, 1997, damaged El Portal Road in 21 locations and weakened it in at least 30 others. Erosion destabilized many sections of the guardwall, roadbed, and fill slope (or downslope, i.e., the area of fill beneath the roadbed sloping down to the river). Road access was restricted prior to the start of Memorial Day weekend 1997 while emergency repairs were made.

Today the El Portal Road is essentially as it was in the late 1920s; a two-lane roadway with 9-foot lanes and a 1-foot shoulder. In addition to the January 1997 flood, several other flood events have damaged the road over the years. Since its construction, the road sustained serious flood damage eight times, requiring the repair of various components of the road; this damage rendered many culverts, gutters, and sections of pavement inadequate.

The improvements included widening travel lanes, repaving the road, rebuilding the guardwall to meet safety standards, increasing lateral clearance by removing rock from the cut slope, decreasing sharp curves by realigning the roadway, improving road drainage, revegetating the corridor, and constructing retaining walls.

This project was completed in 2000.

Agency Name: National Park Service

Project Name: **Fire Management Plan**

Description: The National Park Service prepared a new Yosemite National Park *Fire Management Plan* to replace the 1990 *Fire Management Plan*. The objectives of the plan are to improve ecosystem health, enhance public safety, and provide guidance to park operations for successfully integrating fire with other vegetation management principles. The plan addresses prescribed fire, wildland fire, and community fire protection services. It also addresses parkwide fire issues and considers effects to burn units; vegetation associations; air resources; watersheds; soils; cultural landscapes; and other natural, cultural, and social resource variables.

This plan was completed in the fall of 2004.

Agency Name: National Park Service

Project Name: **Happy Isles Gauging Station Bridge Removal**

Description: The Happy Isles Gauging Station Bridge spanned the Merced River in the east end of Yosemite Valley. The bridge was badly damaged during the January 1997 flood and was deemed unsafe by representatives of the Federal Highway Administration. The bridge began to show signs of immediate failure in 2000 when a large sinkhole appeared on the west abutment. Due to the threat to public health and safety, the bridge was removed in the fall of 2001, thereby improving free-flow of the Merced River. The east abutment was retained to protect the operation stream flow gauge.

The bridge was removed in the fall of 2001.

Agency Name: National Park Service

Project Name: **Happy Isles Fen Habitat Restoration Project**

Description: The Happy Isles Fen is a 2-acre wetland immediately west of the Happy Isles Nature Center in east Yosemite Valley. In 1928, the National Park Service filled in about 3 additional acres of the fen to create a parking lot. The asphalt parking lot was removed in 1970, though imported fill remained. The area impacted by parking lot construction was restored to wetland conditions by removing imported fill and associated upland vegetation, and revegetating with native wetland plants.

This project was completed in the fall of 2003.

Agency Name: National Park Service

Project Name: Merced River Ecological Restoration at Eagle Creek

Description: Eagle Creek flows into Yosemite Valley immediately west of the Three Brothers rock formations and joins the Merced River about one-half mile downstream from Yosemite Lodge. The creek banks of the reach of Eagle Creek between Northside Drive and the Merced River are badly eroded and only sparsely vegetated, partly due to trampling by pedestrians. The eroded riverbank was recontoured, then revegetated; the trampled river terrace was decompacted; and fences were constructed to direct visitors to sandbars for river access. The ecological restoration effort involved the following:

- Plug remaining portions of abandoned sewage lines with concrete and remove the manhole and the concrete structure that crosses the creek bed.
- Restore the eroded creek channel using methods previously tested on the banks of the Merced River. Restoration techniques require building up the bank with willow cuttings, woody debris, rock, and mulch.
- Revegetate the bank of Eagle Creek with native shrubs, cuttings, and seeds.

Redirect visitors to access the river in a more appropriate location that will not cause bank erosion.

This project was completed in 2003.

Agency Name: National Park Service

Project Name: Rehabilitate Yosemite Valley Campground Restrooms

Description: This project rehabilitated 19 six-stall restrooms in Upper Pines, Lower Pines, and North Pines Campgrounds, as well as the 15- to 20-foot walkway approach to each restroom. Work included replacement of staff partitions by installing graffiti-resistant surfaces, painting of exterior trim and interior walls and floors, replacement of mirrors and toilet paper dispensers, repair of outside privacy screens, improvements to meet Americans with Disabilities Act accessibility requirements (replacement of entry doors, installation of grab bars and tilted mirrors as necessary), replacement of wall vents, replacement of signs, replacement of electric service panels, improvement of lighting, and replacement of fill material for walkway approaches.

This project was completed in 2004.

Agency Name: U.S. Forest Service and Bureau of Land Management

Project Name: **South Fork and Merced Wild and Scenic River Implementation Plan**

Description: The U.S. Forest Service and the Bureau of Land Management developed a joint *South Fork and Merced Wild and Scenic River Implementation Plan* in 1991 for the segments of the main stem and South Fork of the Merced River that are under the jurisdiction of these agencies. The segments include a 15-mile portion of the main stem extending from the El Portal Administrative Site to a point 300 feet upstream of the confluence with Bear Creek, a 21-mile segment of the South Fork from the park boundary to the confluence of the Merced River, and a 3-mile segment of the South Fork just upstream of Wawona, where the National Park Service has jurisdiction over the north side of the river and the U.S. Forest Service has jurisdiction over the south side. The plan calls for the long term protection of natural and cultural resources, and managing the area for the use and enjoyment of visitors in a way that will leave the resource unimpaired for future use and enjoyment as a natural setting.

This plan was completed in 1991.

Agency Name: National Park Service

Project Name: *Yosemite Wilderness Management Plan*

Description: The *Yosemite Wilderness Management Plan* provides guidance to park operations for successfully managing Yosemite's designated Wilderness, which comprises almost 95 percent of the park. The plan addresses land management issues within the wilderness, including visitor use, vegetation associations, air resources, noise issues, watersheds, soils, cultural landscapes, and other natural, cultural, and social resource variables.

The plan was implemented in 1989.

Agency Name: Counties—Mariposa, Merced, Mono; National Park Service; U.S. Forest Service; California Department of Transportation (Caltrans); U.S. Department of Transportation.

Project Name: **Yosemite Area Regional Transportation System (YARTS)**

Description: YARTS is a collaborative, interagency effort that began in 1992 to investigate the feasibility and implementation of regional bus service. YARTS is not intended to replace automobile access to Yosemite National Park and does not support a ban on auto access to the park. The system has been designed to offer voluntarily used services between gateway communities and major destinations throughout the park. YARTS has four primary objectives:

- Increase transportation options

- Reduce reliance on automobiles
- Support local economies
- Improve regional air quality

The target market for YARTS service includes those visitors staying overnight in the gateway communities and employees working at Yosemite National Park who live in the gateway communities.

Regional bus service began in 2000.

Agency Name: National Park Service

Project Name: Yosemite Valley Plan

Description: The National Park Service Pacific West Regional Director signed the Record of Decision for the *Final Yosemite Valley Plan and its Supplemental Environmental Impact Statement* on December 29, 2000. The purpose of the Yosemite Valley Plan is to present a comprehensive management plan for Yosemite Valley—from Happy Isles at the east end of the Valley to the intersection of the El Portal and Big Oak Flat Roads near the Cascades area at the west end. It also presents actions in adjacent areas of the park and the El Portal Administrative Site that directly relate to actions proposed in Yosemite Valley. The specific purposes of the *Yosemite Valley Plan* within Yosemite Valley are to:

- Restore, protect, and enhance the resources of Yosemite Valley
- Provide opportunities for high-quality, resource-based visitor experiences
- Reduce traffic congestion
- Provide effective park operations, including employee housing, to meet the mission of the National Park Service

The Record of Decision was signed in December 2000.

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