BACKGROUND

In 1924, Congress created the U.S. Border Patrol (USBP) to serve as the law enforcement entity of the U.S. Immigration and Naturalization Service. Congress transferred all Immigration and Naturalization Service responsibilities to the newly created Department of Homeland Security (DHS) with the passage of the Homeland Security Act of 2002 (Public Law 107-296) on November 25, 2002. The USBP law enforcement organization and responsibilities were transferred to the U.S. Customs and Border Protection (CBP) component of DHS on March 1, 2003. The mission of CBP is to safeguard United States borders, thereby protecting the public from dangerous people and materials while enhancing the nation’s global economic competitiveness by enabling legitimate trade and travel. The priority mission of the USBP is preventing terrorists and terrorist weapons, including weapons of mass destruction, from entering the United States.

The proposed Alamo River Vegetation Control (Proposed Action) Project would preserve line of sight for USBP agents in the El Centro Sector and reduce hiding opportunities of cross-border violators (CBV) within the Alamo River (Project Area). The Project Area is under private and public ownership, including the U.S. Bureau of Reclamation and four private ownership groups. CBP, under the DHS, prepared this Final Environmental Assessment (EA) for the Proposed Action.

The Alamo River originates in Mexico about 2 miles south of the United States/Mexico border. Water within the river is dominated by agricultural return flows from the Imperial Valley.

PROJECT LOCATION

The Project Area for the Proposed Action is located along the Alamo River in the city of Calexico in the southernmost edge of Imperial County, California. The Project Area consists of 12.93 acres of the Alamo River bordered to the south by the United States/Mexico border, to the east by irrigated agricultural fields, and to the west by a sand and gravel business and irrigated agricultural fields.

PURPOSE AND NEED

The purpose of the Proposed Action is to enable CBP to fulfill its mission of protecting the United States southern border and to enhance the safety of USBP agents in carrying out their duties. For CBP to maintain effective control of the border and enhance the safety of USBP agents, it must maintain surveillance sight lines across the Project Area in perpetuity.

The Project Area contains a high proportion of non-native plants that obstruct the view of USBP agents and hinders their ability to detect people illegally crossing the border in the vicinity of the Alamo River. The Project Area is an area of consistent CBV traffic. CBVs
use the tall and dense vegetation in the Project Area to hide from USBP agents before submerging into the water of the Alamo River north of the Project Area to elude detection. CBVs hiding in the brush create an agent safety issue, being able to use the concealment of the vegetation to ambush USBP agents. The purpose of the Proposed Action is to remove this tall and dense vegetation in the Project Area and improve surveillance sightlines for USBP agents across the Project Area.

The need for the Proposed Action is to increase visibility and enhance patrol capabilities to increase security at the United States/Mexico border in the Project Area.

ALTERNATIVES

No Action Alternative (Alternative 1). Under the No Action Alternative, CBP would not conduct vegetation removal and control within the Project Area, maintaining the status quo. The No Action Alternative serves as a baseline against which the impacts of the Proposed Action and any alternatives are compared.

Proposed Action Alternative (Alternative 2). Under Alternative 2, the Proposed Action, CBP proposes to conduct mechanical removal of vegetation (vegetation clearance) within the 12.93-acre Project Area. Mechanical removal would consist of mowing, cutting of vegetation (clipping at grade), and use of heavy equipment to remove all vegetation twice a year, or as required by CBP for surveillance purposes. No discing or up-rooting would occur under this alternative.

Mechanical removal of vegetation would be followed by herbicide treatment to maintain vegetation clearance. Specific herbicides that are compatible with wetlands and water bodies would be used, including RoundUp Custom® and Rodeo®, Garlon 3A®, Polaris Herbicide®, or equivalent herbicides. Use of other herbicides that are readily dispersed into aquatic habitats and that can cause damage to aquatic species would not be used.

Herbicide application could occur up to four times a year, depending on the extent and composition of species requiring management. Staging areas would be sited in previously disturbed areas such as unimproved roads, shoulders, graded areas, or sites with compacted soil that do not support vegetation adjacent to the Project Area.

Mechanical Removal Only Alternative (Alternative 3). Under Alternative 3, only the mechanical removal of vegetation as described under Alternative 2 (Proposed Action) would be conducted. Methods such as mowing, cutting of vegetation, and use of heavy equipment to remove vegetation would be implemented three to four a year, or as required by CBP for surveillance proposes. No herbicide application would occur under Alternative 3.

Other Alternatives Considered but Eliminated.

Another alternative considered was vegetation conversion to a native species vegetation community that is low enough in stature and cover density as to eliminate sightline obstruction. However, it would be challenging to establish or maintain a suitable vegetation composition given that the current native species known from the area are
pervasive and fast-growing, and would quickly grow to a height and density as to create
the same obstruction to sightlines currently posed by the mix of non-native and native
vegetation. Due to the topography and Alamo River banks, vegetation would continue to
cause sightline obstructions at 12 inches in height, thus vegetation conversion within the
Project Area would require regular maintenance similar to the methods described above
for mechanical and herbicide treatment in order to both manage the height and density of
the native species.

Additionally, this type of ecosystem restoration is particularly prone to invasion, as the
restoration process results in disturbance and increased resource availability. Operational
feasibility of maintaining native vegetation adjacent to areas containing non-native
vegetation that would likely spread back into revegetated native areas would also be a
concern. Frequent (minimum of four times per year) treatment of non-native vegetation
would be required, which would also increase the need for ongoing maintenance
activities within the area. This alternative would be time consuming, labor intensive, and
not financially viable. Therefore, this alternative would not meet the stated purpose and
need of the Proposed Action and is not carried forward for analysis in the EA.

ENVIRONMENTAL CONSEQUENCES

The Proposed Action would result in minimal impacts to aesthetics and visual resources,
biological resources, cultural resources, groundwater, hazardous materials and waste
management, and surface waters and Waters of the United States. No impacts to other
resources would be expected.

Aesthetics and Visual Resources. Under the Proposed Action Alternative, negligible
short-term degradation of the aesthetic value of the Project Area would occur during
mechanical removal and herbicide treatment from the presence of construction equipment
and removal of vegetation. Vegetation consists primarily of non-native invasive plant
species that provide minimal aesthetic value. Mechanical removal has occurred in the
area in the recent past. There are no sensitive land uses in the vicinity of the Project Area
that would be affected by the change in viewshed due to vegetation removal; therefore,
no impacts to aesthetic and visual value of these resources would occur.

Air Quality. The Proposed Action would be exempt and a formal conformity
determination would not be required. The Proposed Action would not result in an adverse
air quality impacts under the National Environmental Policy Act.

Biological Resources. CBP proposes to conduct mechanical removal of vegetation
within the 12.93-acre Project Area. Mechanical removal would consist of cutting of
vegetation and use of heavy equipment, and would occur twice a year, or as required by
CBP for surveillance purposes. Mechanical removal would be supplemented with
herbicide application that would occur up to four times per year. Approximately 8.6 acres
of vegetation would be removed.

Vegetation and Non-native Species. Under the Proposed Action, the mechanical removal of
approximately 4.53 acres of native vegetation and supplemental herbicide application would
result in long-term, direct, minor, and adverse impacts to native vegetation communities. Mechanical removal and supplemental herbicide treatment of approximately 4.07 acres of non-native vegetation communities would result in short- and long-term, moderate, and beneficial impacts from the removal of these invasive plant species. The Proposed Action as a whole (removal of native and non-native vegetation) would have a minor, direct, and adverse impact on vegetation communities within the Project Area.

**Migratory Birds.** Under the Proposed Action, the permanent removal of vegetation within the Project Area would result in the loss of foraging and nesting habitat for species protected under the Migratory Bird Treaty Act (MBTA). Potential effects to these species are expected to be short- and long-term, negligible to minor, direct and indirect, adverse effects. If mechanical removal and herbicide treatment must occur during MBTA bird species nesting season, a preconstruction nesting bird survey would be performed to minimize impacts on migratory birds.

**Wildlife.** The mechanical removal and herbicide treatment of vegetation within the Project Area would result in the loss of foraging, breeding, and nesting habitat for some wildlife species. However, these species have been subject to vegetation clearing activities in the recent past within the Project Area. Wildlife would likely avoid the Project Area during mechanical removal and herbicide treatment activities, minimizing potential impacts. In addition, wildlife species observed or potentially present within the Project Area are common, and suitable habitat of various types exists in relative abundance in the vicinity of the Project Area. Therefore, the Proposed Action is expected to have a negligible long-term indirect impact to common wildlife species with potential to occur in the Project Area.

**Federal-listed Species.** Under the Proposed Action, approximately 2.72 acres of potentially suitable habitat (2.68 acre of common reed and 0.04 acre of cattail) for the Yuma Ridgway’s rail (*Rallus longirostris yumanensis*) would be impacted by mechanical removal of vegetation and supplemental herbicide treatment. However, the habitat is not known to be occupied based on 2018 survey results and no direct impacts to Yuma Ridgway’s rail are anticipated. The Proposed Action would result in short- and long-term, minor, direct, and indirect adverse impacts to Yuma Ridgway’s rail potential habitat. The adverse impacts would not exceed the minor impact threshold because the Project Area contains a small amount of potential habitat compared to estimated suitable habitat within Imperial County, potential habitat is isolated, habitat would not likely provide sufficient breeding habitat, and this species is not known to occupy the Project Area (based on survey results). Based on these factors, the Proposed Action is not likely to adversely impact the species. There is no Yuma Ridgway’s rail Critical Habitat within or adjacent to the Project Area; therefore, no impacts to Critical Habitat would occur.

**Cultural Resources.** Based on the records search and survey of the Project Area in 2018, no cultural resources were identified. Therefore, the Proposed Action would not adversely impact any known significant cultural resources or historic properties. The likelihood of subsurface cultural resources to occur within the Project Area is low, primarily as a result of the scouring effects of a flood occurring in 1905–1906. Because the Project Area does not encompass any previously identified cultural resource, and
because no resources were identified during the survey, nor are any buried cultural resources expected due to the 1905–1906 flood, the Proposed Action would have no potential to affect historic properties.

**Floodplains.** Under the Proposed Action, removal of vegetation from the Project Area would result in beneficial changes to flood control by reducing water flow friction caused by obstructions and vegetation in the flood channel. Further, any changes in the extent of vegetation would be addressed from an engineering standpoint, such that flood control of the area would not be compromised. The Proposed Action would not likely result in adverse impacts to the floodplain, and minor long-term beneficial impacts would occur due to improved water flow from vegetation removal.

**Geology and Soils.** The Proposed Action would result in negligible short-term adverse impacts on soils in the Project Area during vegetation removal and herbicide application. No changes to the geology of the Project Area would occur. Glyphosate herbicide, as well as other herbicides, have little to no effect on soil microbial communities. However, herbicide application can drift and affect the growth of non-target species. Best Management Practices (BMPs) have been added to reduce potential impacts to non-target species from herbicide drift.

**Groundwater.** The recharge potential of the Imperial Valley Groundwater Basin would not change as a result of the Proposed Action. The application of herbicides within the Project Area could result in leaching through soils into the groundwater. Mechanical removal practices would reduce the quantities of herbicide needed for subsequent control, due to the reduction in unwanted vegetation masses needing treatment. Re-sprouting species would require a series of follow-up applications of herbicide both within the initial removal period and in subsequent years to be fully eliminated.

Due to the low levels of precipitation in Imperial County, as well as the reduced quantity of herbicide needed after mechanical removal, the potential for herbicide leaching into the groundwater is limited. Overall, the Proposed Action would result in short-term negligible, indirect adverse impacts to groundwater. Current aquifer conditions are likely to continue the same in the future in terms of aquifer recharge and water quality.

**Hazardous Materials and Waste Management.** Under the Proposed Action, herbicide application could result in accidental exposure to hazardous compounds (herbicides, carriers, dyes, and adjuvants). Under all application categories, workers can be exposed to herbicides from accidental spills, splashing, leaking equipment, contact with the spray, or by entering treated areas. Exposure can occur either through skin or through inhalation. Adherence to operational safety guidelines, use of protective clothing, equipment checks, and personal hygiene can prevent incidents from occurring. Additionally, accidental drift of chemicals to adjacent properties could occur. BMPs would ensure that no adverse effect would occur from using hazardous materials.

**Surface Waters and Waters of the United States.** U.S. Army Corps of Engineers (USACE) and Regional Water Quality Control Board (RWQCB) jurisdictional waters (wetland and non-wetland) that may be adversely affected by the Proposed Action are
3.21 acres (1,976 linear feet). Short-term, negligible to minor, direct, adverse impacts would occur to USACE and RWQCB jurisdictional waters from mechanical removal of vegetation and the application of herbicides within the Project Area. Proper maintenance of equipment and the use of BMPs during construction activities would minimize the possibility of accidental spills of petroleum, oil, and lubricants that, if they occurred, could affect surface water. The application of herbicides as part of the Proposed Action would directly apply the herbicide to the plant, limiting the potential for runoff into jurisdictional waters. Standard BMPs would be adopted to maintain water quality in jurisdictional waters and would minimize the potential for short- or long-term, direct, or indirect adverse effects.

ENVIRONMENTAL DESIGN MEASURES, BEST MANAGEMENT PRACTICES, AND MITIGATION MEASURES

Environmental design measures, BMPs, and mitigation would be implemented to minimize potential impacts. The following BMPs and mitigation measures would ensure the protection of the resources of the Alamo River:

Biological Resources. The following measures would be employed to avoid and/or minimize effects on biological resources:

- Prior to vegetation removal activities occurring during the bird breeding season (March 1–September 30), a qualified biologist must survey the area for nesting and migratory birds, including threatened and endangered species. This would include burrowing and ground-nesting species in addition to those nesting in vegetation. If any active nests (containing eggs or young) are found, a properly sized buffer area must be avoided until the young birds fledge.
- Prior to the initiation of Project activities, all Project Areas would be demarcated in coordination with the biological monitor to ensure that adverse effects to biological resources are minimized and that no work is performed outside the designated boundaries.
- Mechanical vegetation treatment and re-treatment would occur between October 1 and February 28, to avoid any impacts to migratory birds during the breeding season.
- A biological monitor would conduct an environmental training program for all crew members working on the Project and would perform site visits to ensure compliance with BMPs and monitor vegetation removal activities.
- Vehicles and equipment would be operated in existing and designated access areas, and staging of all equipment would occur in designated areas of developed/disturbed or agricultural land.
- The contractor would pick up and remove trash and debris from the jobsite daily.
- Appropriate BMPs would be implemented and would include but not be restricted to: installation of measures to minimize erosion and siltation associated with vegetation removal activities; refueling of machinery following accepted guidelines and all vehicles equipped with drip pans during storage to contain
minor spills and drips; and preparation of a Spill Prevention, Containment, and Countermeasures Plan prior to the start of work.

- CBP would not, for any length of time, permit any pets inside the Project Area or adjacent native habitats. This BMP does not pertain to law enforcement animals.

Species-specific Measures for Yuma Ridgway’s Rail.

- Mechanical vegetation treatment and herbicide treatment would generally occur between October 1 and February 28, to avoid any impacts to migratory birds during the breeding season.

- If vegetation removal activities occur during the bird breeding season (March 1 – September 30), a qualified biologist would survey the area for nesting and migratory birds, including federally threatened and endangered species. This would include burrowing and ground-nesting species in addition to those nesting in vegetation. If any active nests are found, an appropriately sized buffer area would be avoided until the young birds fledge.

- A biological monitor would conduct an environmental training program for all crew working on the project and would perform site visits to ensure compliance with BMPs and monitor vegetation removal activities.

- Prior to the initiation of Project activities, all project areas would be demarcated in coordination with a biological monitor to ensure that adverse effects to biological resources are minimized and that no work is performed outside the designated boundaries.

- Vehicles and equipment would be operated in existing and designated access areas, and staging of all equipment would occur in designated areas of developed/disturbed or agricultural land.

- The contractor would pick up and remove trash and debris from the job site daily.

- Appropriate BMPs would be implemented and would include but not be restricted to: installation of measures to minimize erosion and siltation associated with vegetation removal activities; refueling of machinery would follow accepted guidelines and all vehicles would be equipped with drip pans during storage to contain minor spills and drips; and Spill Prevention, Containment, and Countermeasures Plan would be prepared prior to the start of work.

- CBP would not, for any length of time, permit any pets inside the Project Area or adjacent native habitats. This BMP does not pertain to law enforcement animals.

- Prior to any maintenance activities associated with vegetation control, a focused survey would be conducted to confirm the presence or absence of Yuma Ridgway’s rail. If Yuma Ridgway’s rail is found within the Project Area, no removal of habitat would take place within 500 feet of occupied habitat.

- A qualified biological monitor would be present during all vegetation removal activities to ensure avoidance and effects to sensitive species and critical habitats on-site.
Cultural Resources.

CBP would notify the Viejas Band of Kumeyaay Indians of scheduled activities within the Project Area and facilitate access for a Kumeyaay Cultural Monitor, and provide the contact information for the contractor conducting the work prior to ground disturbing activities.

Should any archaeological artifacts be found during implementation of the Proposed Action, the Standard Operating Procedure for Post-Review Discovery of Cultural Materials or Human Remains would be implemented as described in Section 5 of the EA and is incorporated herein by reference.

Hazardous Materials and Waste Management. The following measures would be employed to avoid and/or minimize effects from hazardous materials:

• To minimize potential impacts from hazardous and regulated materials, all fuels, waste oils, and solvents would be collected and stored in tanks or drums within a secondary containment system that consists of an impervious floor and bermed sidewalls capable of containing the volume of the largest container stored therein. The refueling of machinery would be completed in accordance with accepted industry and regulatory guidelines, and all vehicles would have drip pans during storage to contain minor spills and drips. Although it is unlikely that a major spill would occur, any spill of reportable quantities would be contained immediately within an earthen dike, and the application of an absorbent (e.g., granular, pillow, sock) would be used to absorb and contain the spill.

• CBP would ensure that all herbicide applicators have received training and are licensed in appropriate application categories.

• CBP would follow all herbicide and material safety data sheet instruction regarding worker safety standards. These include the following:
  o wear appropriate protective equipment;
  o do not eat, drink, or smoke when handling herbicides;
  o avoid spilling herbicides on skin or clothing (promptly change any clothing substantially contaminated by a herbicide);
  o clean and wash protective equipment daily;
  o have ready access to clean water and first aid supplies;
  o have access to emergency medical facilities;
  o observe specified restricted entry intervals; and
  o use self-contained herbicide handling equipment when appropriate and available to reduce worker exposure during herbicide mixing and handling.

• CBP would contain non-hazardous waste materials and other discarded materials, such as construction waste, until removed from the construction and maintenance sites. This would assist in keeping the Project Area and surroundings free of litter and reduce the amount of disturbed area needed for waste storage.

• CBP would minimize site disturbance and avoid attracting predators by promptly removing waste materials, wrappers, and debris from the site. Any waste that must remain more than 12 hours would be properly stored until disposal.
• All waste oil and solvents would be recycled. All non-recyclable hazardous and regulated wastes would be collected, characterized, labeled, stored, transported, and disposed of in accordance with all applicable Federal, state, and local regulations, including proper waste manifesting procedures.

• Solid waste receptacles would be maintained at the construction staging area. Nonhazardous solid waste (trash and waste construction materials) would be collected and deposited in on-site receptacles. Solid waste would be collected and disposed of by a local waste disposal contractor.

• CBP would notify adjacent agricultural land owners of herbicide application dates and provide a list of chemicals to be used.

• Herbicides would not be applied when winds exceed more than 10 miles per hour to avoid herbicide drift into adjacent agricultural fields.

• Herbicides would not be applied when ambient temperatures are such that could result in volatilization of the chemicals.

• Herbicides would not be sprayed within 50 feet of adjacent agricultural fields.

**Surface Waters and Waters of the United States.**

Prior to contractor conducting vegetation control activities, CBP/USBP would notify the Imperial Irrigation District (IID) to ensure activities and staging areas would not impact IID's ability to operate and maintain the All-American Canal.

The following measures would be employed to avoid and/or minimize effects to surface waters and Waters of the United States:

• To protect surface waters and Waters of the United States, CBP would comply with all conditions pursuant to Section 401 of the Clean Water Act, would prepare required plans, and would acquire all necessary permits and certifications. All beneficial uses of surface water would be protected with standard BMPs, such as erosion control and water quality protection measures during construction to minimize the potential for impacts to surface waters and Waters of the United States. CBP would work under the USACE Regional General Permit to remove vegetation from Waters of the United States.

• Take precautions to minimize drift by not applying herbicides when winds exceed more than 10 miles per hour, or a serious rainfall event is imminent.

• Use drift control agents and low volatile formulations, as appropriate, to reduce the drift to non-target species and surface water.

• Ensure the application is done to avoid overspray to maximize uptake within the vegetative material and minimize any input into the river and banks.

• Monitoring ambient temperature during herbicide application to minimize the volatilization of certain chemicals during spray.
FINDING

Based on the results of the Environmental Assessment and the environmental design measures, BMPs, and mitigation measures to be incorporated as part of the Proposed Action, it has been concluded that the Proposed Action will not have a significant adverse effect on the environment. Therefore, no further National Environmental Policy Act analysis (i.e., Environmental Impact Statement) is warranted.

Ntina Cooper
Deputy Executive Director
Strategic Planning and Analysis Directorate
U.S. Border Patrol

Robert F. Janson
Acting Director
Facilities Management and Engineering Division

3/25/19
3/27/19
Date
Date