Completing Mitigation at U.S. Customs Land Ports of Entry Paula Bienenfeld, Avaya Support with U.S. Customs and Border Protection Paper presented at the 33RD Annual Conference of the International Association for Impact Assessment, Calgary, Canada May 2013

Introduction

In 2009, U.S. Customs and Border Protection (CBP), a component agency of the U.S. Department of Homeland Security (DHS), received funding through the American Recovery and Reinvestment Act (ARRA) for construction and oversight activities to modernize CBP-owned Land Ports of Entry (LPOEs) to address National security needs and facilitate the flow of legitimate trade and travel. CBP undertook a modernization project for more than 30 LPOEs along the U.S. borders with Canada and Mexico.

New construction included a new Main Port Building constructed near the existing port buildings, and new traffic patterns with newly-routed inbound and outbound inspection lanes with new inspection booths or canopies. In some cases a secondary inspection garage was built. Other support facilities included both enclosed parking and surface parking spaces, and perimeter fencing.

The mission of CBP is to secure the borders of the United States while facilitating the efficient movement of legitimate travel and trade. The Nation's LPOE inventory and related infrastructure is maintained by CBP's Field Operations Facilities Program Management Office (FOF PMO). While the FOF PMO maintains the facilities, it is the Office of Field Operations (OFO) that utilizes the LPOE inventory to achieve CBP's mission. OFO operations include passenger, agricultural, and cargo operations; trade compliance and facilitation targeting and analysis; and seizures and penalties. In addition, OFO partners with many public, private, and foreign sector organizations (e.g., Transportation Security Administration, U.S. Coast Guard, Department of Agriculture, World Customs Organization) to accomplish CBP's mission.

Planning and implementation of the modernization project at the LPOEs required CBP to conduct environmental analysis in accordance with the National Environmental Policy Act (NEPA) to identify possible impacts to the environment that could be caused by the construction and operation of the new facilities. As part of the NEPA process, Federal agencies also analyze impacts required by other U.S. laws, including the National Historic Preservation Act (NHPA), the Endangered Species Act of 1973 (ESA), the Migratory Birds Treaty Act, the Clean Air Act, and the Clean Water Act. CBP also followed Executive Orders (EO), including EO 13175, Consultation and Coordination with Indian Tribal Governments.

This paper focuses on the identification of these impacts, and successful implementation of mitigation efforts at four LPOEs: Los Ebanos in Texas; Boundary in Washington; and Forest City and Bridgewater in Maine.

National Environmental Policy Act of 1969

Signed into law in 1970, NEPA requires Federal agencies take into account the effects of their undertakings on the environment. To comply with NEPA, CBP completed Environmental Assessments (EAs) for each of the modernization undertakings at the individual LPOEs. In most cases, the assessment found that there were either no impacts; or impacts were minor. However, at some facilities, CBP identified a higher level of impact. In these cases, CBP either implemented mitigation measures to lessen the adverse effects; or revised project plans so as to avoid impacted areas.

Four Case Studies

Presented here are four cases where CBP identified possible adverse impacts to environmental resources, and mitigation or avoidance was required. While avoidance is always preferable, in these cases it was not completely possible. For example, the EA completed for the Los Ebanos, Texas LPOE identified possible adverse impacts to threatened and endangered species. Through consultation with the U.S. Fish and Wildlife Service (USFWS), the level of impacts was reduced so that the effects were determined to be minor. The consultation process led to mitigation and monitoring efforts there. At the Boundary, Forest City, and Bridgewater LPOEs, significant archaeological sites were identified. As required by the NHPA, CBP consulted with the Washington and Maine State Historic Preservation Officers (SHPOs) and in the case of Washington, the Confederated Tribes of the Colville Reservation, to come to agreements on mitigation requirements. Mitigation efforts are ongoing. While the work was completed within the framework of existing laws and regulations, the opportunity to examine and compare frontier life across the northern border within the framework of the 'frontier' concept was unusual.

Threatened and Endangered Species Mitigation: Los Ebanos, Texas LPOE

The Los Ebanos LPOE is located on the Rio Grande at the international boundary with Mexico, on Flores Street in southern Hidalgo County, Texas. A historic hand-operated ferry crosses the Rio Grande, moving travelers back and forth across the border with Tamaulipas, Mexico.

As required by NEPA, an EA was completed for the modernization and operation undertaking at the Los Ebanos LPOE. As part of the EA, potential impacts to threatened and endangered species were analyzed to comply with ESA. According to the USFWS, at the time of the analysis, six federally endangered species are listed for Hidalgo County, Texas (U.S. Fish and Wildlife Service 2009). These species are the Gulf Coast jaguarundi, ocelot, northern aplomado falcon, star cactus, Texas ayenia, and Walker's manioc. The environmental analysis determined that there could be adverse impacts to both the ocelot and jaguarundi due to construction and operation of the proposed action near corridors along which they may travel.

Ocelots once existed across much of south Texas from the Trans Pecos to the Louisiana border, (Schmidly 2004). Two breeding populations are known in southern Texas: These populations lie approximately 75 miles east and 60 miles northeast of the LPOE, respectively.

Very little is known about jaguarundi habitat in Texas. Habitat requirements are thought to be similar to those of the ocelot, which has been regularly documented in the state (U.S. Fish and Wildlife Service, 1990). In south Texas, the presumed preferred habitat for both the ocelot and, presumably, the jaguarundi, is thick thornscrub communities; oak/mesquite forests may also be used (Horne, et al. 2009; U.S. Customs and Border Protection 2010). In addition to dense thornscrub and oak/mesquite forests, ocelots also use vegetated corridors for nocturnal hunting. These corridors can include areas of dense vegetation along rivers, irrigation canals, irrigation drains, natural drainages, fence lines, roads, and other artificial corridors.

As a result of the analysis, CBP initiated formal consultation with USFWS while the EA was being prepared, and mitigation efforts were identified and negotiated between the two agencies. As part of the consultation process, CBP prepared a Biological Assessment for review by USFWS. In response, USFWS prepared a Biological Opinion, which became part of the EA and formal record and set the terms of the mitigation. Negotiations between CBP and USFWS resulted in a series of mitigation efforts to compensate for possible habitat removal, loss of connectivity through the wildlife corridor, and the possible impacts due to lighting and noise. CBP reviewed the entire construction and operation project in consultation with USFWS and changes to construction and operation were instituted. These measures included changes to the lighting sources at the port so that all lighting would be located within the perimeter fence and bright lights would be diminished in the identified habitat area. Lighting intensity along the perimeter fence was reduced; and through the use of downshielding, direct illumination was limited. In addition, CBP agreed to revegetate the areas where vegetation removal was necessary for construction. A revegetation plan was developed in consultation with USFWS to ensure that appropriate plants were used.

As construction proceeded, CBP worked with USFWS and construction project managers to implement and monitor the mitigation tasks. CBP held weekly calls with the construction team to monitor construction progress, discuss issues, and answer questions relating to implementation of the environmental mitigation efforts. Mitigation efforts are ongoing in order to fulfill the terms of the Biological Opinion.

Historic Properties Mitigation: Boundary, Washington LPOE; Bridgewater and Forest City, Maine LPOEs

To comply with Section 106 of the NHPA CBP conducted surveys at each of the LPOEs to identify the presence of any historic properties that could be eligible for listing on the National Register of Historic Places. Archaeological sites at the Boundary, Bridgewater, and Forest City LPOEs were identified as meeting significance criteria. Early consultation with SHPOs and Native American tribes and nations resulted in memoranda of agreements (MOAs) to implement mitigation and avoidance measures. These MOAs acted as a roadmap to identify and complete specific mitigation requirements.

As a result of the NEPA process, in certain instances, sites were avoided and preserved. In other cases, where avoidance was not possible, archaeological findings led to increased knowledge of the earliest prehistoric and historic period life along the northern border. Other mitigation

measures included public outreach, such as kiosks at the LPOEs, brochures, and public presentations.

To assure mitigation measures are completed according to the memoranda, all mitigation measures are monitored through bi-weekly calls with the implementation team. In the cases where avoidance was possible, construction plans identify sites and buffer zones to be avoided during construction. As construction plans proceeded, members of the environmental team reviewed construction maps to ensure the protection of remaining sites.

Boundary, Washington LPOE

The Boundary LPOE is located on the east bank of the Columbia River, on the Waneta-Northport Road in Stevens County, Washington. Prior to construction, CBP initiated NHPA Section 106 consultation with the Washington SHPO and stakeholder Native American tribes and nations. The Confederated Tribes of the Colville Reservation responded and continue to be involved in the mitigation efforts. As required, CBP completed an initial survey of the Boundary project area, the historic period townsite of Old Boundary (Site 45ST632), and an associated cemetery. Additional archaeological work, including non-invasive geophysical surveys, was completed as part of a negotiated MOA between the SHPO and CBP. The site was identified as eligible for listing on the National Register of Historic Places.

The archaeological work at Boundary included initial excavations of 99 shovel 'probes;' and subsequent excavation of 87 larger test units. Over 25,000 artifacts were recovered and 20 new features were identified. The project yielded information on a western mining and timber frontier town that operated for a brief period from the 1880s through the 1920s. Artifacts revealed a mix of immigrants from China, Sweden, and Italy, along with migrants from the eastern United States, all drawn to the Northwest by the promise of jobs and a new life. Fragments from a Chinese ceramic jug used to hold soy or vinegar were recovered, as were fragments from a Swedish language newspaper. One unusual find was an entire underground pipe system that was installed to flow below the town. The system may have been used as part of the pole milling process to manufacture wood poles for the new telegraph and telephone industries (Ahlman, et al., 2012).

Forest City, Maine LPOE

The Forest City LPOE is located in rural Washington County at the international border separating Maine and the Canadian province of New Brunswick. As with the Boundary LPOE, CBP identified an archaeological site that was determined eligible for listing on the National Register of Historic Places. The site, Site 126.31, dates to the PaleoIndian Period. The site is a spatially discrete, short-term, single component activity area; the remains of nomadic peoples who lived in or traveled through the area sometime between 11,000 to 10,400 years before the present (BP). As with the other archaeological sites, the archaeology task was completed in accordance with a MOA between CBP and the Maine SHPO. The work yielded information on one of the oldest records of human occupation in Maine (Hudgell, et al., 2013).

Over 60 square meters were excavated at the site, and almost 700 artifacts were recovered at Site 126.31. Tools, including scrapers and a graver were recovered to indicate woodworking or processing of animal hides, or meal preparation. Stone debris provides evidence for the

manufacture of these tools. The artifacts, features, and configuration of the site suggest a relatively small group of people, likely related family members, were engaged in activities including stone tool working and plant and/or animal resource processing. The activities appear to have taken place over a brief period of days or a week, based on the spatial relationships of the findings. The site is a rare finding of one of the earliest settlements of the first occupants of the New World.

Bridgewater, Maine LPOE

The Bridgewater, Maine LPOE is located at the international boundary with Canada on Boundary Line Road in eastern Aroostook County, Maine, in a rural area.

Archaeological surveys at Bridgewater identified two archaeological sites, one of prehistoric Native American occupation and a second of Historic Period occupation, overlapping in location. These are Native American Site 159.1 ME, the Boundary Line Road Site, dating to the Early Archaic Period, ca. 7,000 B.C., and Historic Period Site ME 055-001, the Boundary Line Mill Hamlet, dating from ca. A.D. 1827-1879. The Historic Period site provides one of the best pictures to date of frontier life at the border. The archaeological work at Bridgewater included excavation of over 140 test units, and mechanical backhoe excavations. A total of 113 Native American prehistoric artifacts, and over 41,000 historic period artifacts were recovered, helping to reconstruct life in this region in the past.

The detailed archival research conducted as part of the mitigation efforts, together with the excavation findings, reveal an active and growing frontier town. From the research conducted at Bridgewater it is possible to see the beginnings and evolution of American industrial life on a small scale. The first settler, Nathanial Bradstreet, built a mill. He and his family were joined by other settlers, and the town grew to include blacksmith shops, farms, residences, and stores, (Scharoun, et al., 2013). Shirt buttons, cufflink insets, a thimble and straight pins, a locket, and comb and toothbrush fragments tell of the personal lives of the inhabitants of this growing town. The finding of the blacksmith shop provides evidence of daily life as well as evidence of the growing industry at the town. Files, chisels, tongs, and axes were found in the remains of the blacksmith shop. Ceramics imported from the Netherlands and England recovered throughout the site are evidence of the relationship between this small, isolated frontier town and the larger world and trade networks of the time.

While small in size, the prehistoric site also yielded information about life at the project area. The stone tools and debris revealed the remains of successive short-term encampments, providing a glimpse of life during the earliest settlement of the area. Radiocarbon dating for one of the encampment areas confirmed specific dates for the occupation there. Fire-cracked rock recovered suggests the cooking methods, such as boiling liquids using hot stones, and roasting food.

Conclusions

By following U.S. environmental laws and regulations, CBP mitigated potentially adverse effects to both wildlife and significant historic properties for the ARRA LPOE modernization facilities. In complying with these environmental laws, CBP achieved the aim of these laws, which in part is to contribute to knowledge of the historic resources of the United States and to preserve an

irreplaceable heritage; and to protect imperiled species. To achieve this success, CBP implemented specific, consistent measures throughout the life of the construction and operation projects. These measures include identifying impacts early in the NEPA process; contacting all stakeholders early in the process; negotiating mitigation measures throughout the NEPA process; and convening regular monitoring and meetings with construction project managers and agency personnel.

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