

ENVIRONMENTAL ASSESSMENT

PROPOSED EXPANSION OF THE

BUREAU OF ENGRAVING & PRINTING

WESTERN CURRENCY FACILITY

FORT WORTH, TEXAS



APRIL 2018

PREPARED FOR
U.S. Department of the Treasury
Bureau of Engraving and Printing
Fort Worth, TX

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DRAFT
FINDING OF NO SIGNIFICANT IMPACT
EXPANSION PROJECT AT
WESTERN CURRENCY FACILITY (WCF) FORT WORTH, TEXAS

AGENCY: U.S. Department of the Treasury (Treasury), Bureau of Engraving & Printing (BEP)

ACTION: Finding of No Significant Impact (FONSI)

SUMMARY: The BEP prepared and published an *Environmental Assessment (EA) for Expansion of the Western Currency Facility (WCF)* to assess the potential environmental consequences associated with proposed construction and demolition activities at the facility, located in the City of Fort Worth, Tarrant County, Texas. The EA was prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) and the corresponding NEPA-implementation regulations established by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] Parts 1500-1508) and USAF (32 CFR Part 989).

Proposed Action and Alternatives: The overall purpose of the Proposed Action is to maintain the security of the Federal Reserve notes through the production of new currency design that provides improved security features (Next Generation of Currency). In order to meet production demands of new currency design, BEP must expand production capacity at the WCF.

Proposed Action

The Proposed Action includes the expansion of the WCF through the addition of production space and capability as well as expanded support facilities. The Proposed Action also includes the removal of two 10,000-gallon underground diesel fuel tanks and replacement with similar aboveground storage tanks. Overall implementation of the Proposed Action would result in a net increase of approximately 300,000 square feet (sf) of interior facility space at the WCF as well as the construction of new alternate entrance and delivery inspection facility, 300 additional parking spaces, and an upgraded central utility plant.

No Action Alternative

Under the No-Action Alternative, the proposed expansion and improvements identified for the Proposed Action would not be implemented, the Western Currency Facility would not be able to expand to accommodate the new technology or security requirements for printing currency, and the Federal Reserve would not receive the service or products it desires. Because CEQ regulations stipulate that the No-Action Alternative be analyzed to assess any environmental consequences that may occur if the Proposed Action is not implemented, this alternative will be carried forward for analysis in the EA. The No-Action Alternative also provides a baseline against which the Proposed Action can be compared.

Factors Considered in Determining That No Environmental Impact Statement is Required:

The EA analyzed the potential environmental impacts of implementing the Proposed Action by taking into account all of the relevant environmental resource areas and existing conditions at the Western Currency Facility and surrounding vicinity. The following resources were analyzed in detail in the EA: air quality, transportation and circulation, biological resources, archaeological and historic resources, water resources, utilities and infrastructure, and solid waste and hazardous materials and wastes. BEP has examined these resource areas and has found that implementation of the projects included in the Proposed Action would not result in any significant impacts.

Public Notice: The BEP initially solicited comments on the Proposed Action from Federal, Tribal, State, and local governments in a letter dated 26 February 2018 (*Interagency Coordination and Consultations*, Appendix A of the EA). Comments received during the scoping period were addressed accordingly in the EA and are included as part of Appendix A.

NEPA, 40 CFR Parts 1500-1508, and 32 CFR Part 989 require that the public have an opportunity to review an EA before approval of a Finding of No Significant Impact (FONSI) and implementation of the Proposed Action. A Notice of Availability for public review of the Draft EA will be published in the *Fort Worth Star-Telegram* and the Draft EA will be made available for public review at the Fort Worth Central Library located at 500 West Third Street, Fort Worth, Texas 76102 to facilitate this opportunity for public review.

Determination: Based on the requirements of NEPA, 40 CFR Parts 1500-1508, and 32 CFR Part 989, I conclude that the environmental effects of implementing the Proposed Action would not be significant and, therefore, an Environmental Impact Statement will not be prepared. The signing of this FONSI completes the BEP Environmental Impact Analysis Process.

MARCELO DIJAMCO
Manager, Facilities Division
Western Currency Facility
Bureau of Engraving & Printing

Date

Executive Summary

The BEP prepared and published an *Environmental Assessment (EA) for Expansion of the Western Currency Facility (WCF)* to assess the potential environmental consequences associated with proposed construction and demolition activities at the facility, located in the City of Fort Worth, Tarrant County, Texas. The EA was prepared in accordance with the requirements of the National Environmental Policy Act (NEPA) and the corresponding NEPA-implementation regulations established by the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] Parts 1500-1508) and USAF (32 CFR Part 989).

PURPOSE AND NEED

Purpose. The purpose of the Proposed Action is to maintain the security of the Federal Reserve notes through the production of a new currency design that provides improved security features (Next Generation of Currency). In order to meet production demands of new currency design, BEP must expand production capability at the WCF.

Need. The Proposed Action is needed for the BEP to fulfill its responsibility to ensure the continued security of the U.S. currency. Although the counterfeiting of currency was substantially reduced after the establishment of the U.S. Secret Service (USSS), this crime still represents a potential danger to the nation's economy. Today, counterfeiting once again is on the rise. One reason is the ease and speed with which large quantities of counterfeit currency can be produced using modern photographic and printing equipment. According to the USSS, \$47.5 million in counterfeit currency entered circulation in fiscal year 2001. Of this amount, 39 percent was computer generated, compared to only 0.5 percent in 1995 (BEP 2003). In order to meet the demand for printing of the Next Generation of Currency, BEP's existing capabilities will be modified to accommodate the new designs. However, given development constraints at the Washington, D.C. facility, the WCF has been identified to support expansion.

PROPOSED ACTION AND ALTERNATIVES

The overall purpose of the Proposed Action is to maintain the security of the Federal Reserve notes through the production of new currency design that provides improved security features (Next Generation of Currency). In order to meet production demands of new currency design, the BEP must expand production capacity at the WCF.

Proposed Action. The Proposed Action includes the expansion of the WCF through the addition of production space and capability as well as expanded support facilities. The Proposed Action also includes the removal of two 10,000-gallon underground diesel fuel tanks and replacement with similar aboveground storage tanks. Overall implementation of the Proposed Action would result in a net increase of approximately 300,000 square feet (sf) of interior facility

space at the WCF as well as the construction of new alternate entrance and delivery inspection facility, 300 additional parking spaces, and an upgraded central utility plant.

No Action Alternative. Under the No Action Alternative, the proposed expansion and improvements identified for the Proposed Action would not be implemented, the WCF would not be able to expand to accommodate the new technology or security requirements for printing currency, and the Federal Reserve would not receive the service or products it desires. Because CEQ regulations stipulate that the No Action Alternative be analyzed to assess any environmental consequences that may occur if the Proposed Action is not implemented, this alternative will be carried forward for analysis in the EA. The No Action Alternative also provides a baseline against which the Proposed Action can be compared.

ENVIRONMENTAL CONSEQUENCES

The environmental analysis included in the EA focused on the following resource areas: air quality, transportation and circulation, biological resources, archaeological and historic resources, water resources, utilities and infrastructure, and solid waste and hazardous materials and waste. BEP has found that implementation of the Proposed Action would not result in any significant impacts to these resource areas.

Per NEPA, the resource areas that are anticipated to experience either no impacts or negligible environmental impact were not examined in detail in this EA. These resource areas include: noise, geological resources, safety, environmental justice, and land use. Section 3.2, *Scoping and Environmental Review Considerations*, Pages 3-2 to 3-3 of the EA provides the rationale for dismissal of these resource areas.

Air Quality (Section 3.3, Pages 3-3 to 3-7 of the EA):

There would be temporary, localized emissions during site preparation and construction activities associated with the Proposed Action. The implementation of the Proposed Action would result in a net increase of approximately 300,000 square feet (sf) in total facility space at the WCF. Emissions associated with existing operational capacity of the facility (e.g., additional printing presses) are regulated by Air Quality Permit No. 17994 from the TCEQ and are currently required to not exceed a total of 25 tons per year of all types of criteria pollutants with no one pollutant permitted to exceed 10 tons per year. While the exact number and capacity of additional emissions sources is not currently known, the total expansion area would restrict additional production capacity to less than double which would ensure that the future annual air emissions from the WCF would not exceed any of the established *de minimis* standards resulting in a significant impact.

Short-term, construction activities necessary to implement the Proposed Action would potentially result in a temporary, but measurable, increase in criteria pollutants such as O₃, CO, PM_{2.5}, and PM₁₀. However, short-term, construction activities would not result in emissions that exceed *de minimis* threshold levels for significant impacts. Under the No Action Alternative, no long-term or short-term changes to air quality would occur.

Transportation and Circulation (Section 3.4, Pages 3-7 to 3-10 of the EA):

Under the Proposed Action, a new delivery and visitor entrance with inspection station would be constructed providing a third entrance to the facility from Blue Mound Road. Additionally, existing staff parking would be expanded by 300 spaces in order to accommodate additional employees associated with the expanded printing and administrative requirements to meet new currency design guidelines. Employees would continue to enter the facility via the existing entrance. The proposed expansion of the facility including the expanded parking lot would support an approximate 10 percent increase in staffing at the facility across all shifts. Therefore, the Proposed Action would result in an additional 103 AM peak hour trips to the local road network which already supports approximately 2,221 AM peak hour and 1,917 PM peak hour trips north of the WCF along Blue Mound Road and 5,296 AM peak hour trips and 5,107 PM peak hour trips south of the WCF along Blue Mound Road and Harmon Road. This would result in less than three percent increases in traffic volumes in the vicinity of the project site. Therefore, the Proposed Action would not make a significant contribution to additional traffic along Blue Mound Road when compared to the existing baseline traffic levels along this stretch of roadway. Under the No Action Alternative, traffic volumes associated with the Western Currency Facility would not change from the existing condition and no impacts would occur.

Biological Resources (Section 3.5, Pages 3-10 to 3-12 of the EA):

Construction included in the Proposed Action at the Western Currency Facility would largely be sited contiguously with the existing facility. The unbuilt areas at the Western Currency Facility are either impervious cover or mowed turf with scattered trees. While the trees onsite could serve as perches for the occasional raptor, no suitable wildlife habitat was observed and no sensitive species were observed. Consequently, the Proposed Action would not result in significant impact to biological resources. Further, the No Action Alternative would not include ground disturbance and would not result in impacts to biological resources.

Archaeological and Historic Resources (Section 3.6, Pages 3-12 to 3-15 of the EA):

The Phase I research and survey for archaeological and historic resources did not discover any evidence of archaeological resources or the residence/farmstead that previously stood on the site. Therefore, it is unlikely that the Proposed Action, including ground-disturbing construction activities would negatively impact these resources, and no significant impacts would occur. In order to ensure no significant impacts to archaeological resource would occur, Mitigation Measure MM-CUL-1 *Inadvertent Archaeological Discoveries* would be implemented if a resource is uncovered/disturbed during construction.

There would be direct physical and visual impacts to the WCF under the Proposed Action. However, while the material integrity of the facility will be impacted, the Proposed Action would not negatively impact the “historic” integrity of the site as the facility does not currently meet any of the four criteria under Criterion Consideration G for inclusion on the NRHP. Therefore, the Proposed Action would not negatively impact the WCF’s form, function, and mission and would not change the location, setting, feeling, workmanship, or association of the WCF in a manner that

would preclude it from future inclusion on the NRHP, and no impacts would occur. Under the No Action Alternative, no changes to the Western Currency Facility would occur; therefore, no impacts would occur.

Water Resources (Section 3.7, Pages 3-15 to 3-18 of the EA):

The expanded facility, associated expanded printing capacity, and additional 140 employees would not generate additional water demand that would exceed the capacity of Fort Worth Water to supply. As an example, the WCF would need to increase total water demand by 2.5 million GPD to represent one percent of the daily water service of Fort Worth Water. Given that prior reporting of water usage at the WCF was expected to be 184,750 GPD in 2004, or less than one tenth of one percent (2.5 million GPD) of Fort Worth Water's daily service, the Proposed Action would not have a significant impact on water demand.

The expanded facility and associated expanded printing capacity and additional 140 employees would not generate additional wastewater that would exceed the capacity of the Village Creek Wastewater Treatment Plant. As an example, the WCF would need to discharge nearly two million additional gallons per day to utilize an additional one percent of the 2017 capacity of the Village Creek Wastewater Treatment Plant. Therefore, the Proposed Action would have a less than significant impact on water resources, water supply, and wastewater supply. Under the No Action Alternative, the existing demand for water and wastewater generation would not change from the existing condition and no impact would occur.

Utilities and Infrastructure (Section 3.8, Pages 3-18 to 3-19 of the EA):

Under the Proposed Action, utility infrastructure onsite including electrical supply would be upgraded to account for expanded printing and administrative capacities to meet future requirements. As stated above, regional utility providers are operating with surplus supply that would accommodate any increased demand related to the expansion of the WCF. Specifically, the local electrical grid is operating with a surplus of over 4,000 MW during peak demand periods and the natural gas utility is operating with a peak demand period surplus of over 1 billion cubic feet of gas. The proposed expansion of the WCF would neither create additional system demand that would deplete these ongoing surplus conditions nor create such demand that new sources are required to be developed to support the facility. Therefore, regional utility providers, electricity and natural gas, have sufficient capacity to accommodate increased demands, and no significant impact to onsite or local utilities services would result from implementation of the Proposed Action. Under the No Action Alternative, the demand for public utilities including electricity would not change from the existing condition and no impacts would occur.

Non-Hazardous Waste and Hazardous Materials & Wastes (Section 3.9, Pages 3-19 to 3-24):

The proposed expansion areas would support additional or updated printing presses which in turn would potentially increase the total waste output, hazardous and non-hazardous, of the facility. However, historical waste output levels described in the previous 2004 EA were higher

than 2016 levels. Using a most conservative estimate with the assumption that all outputs scale as a straight line, it would require a 50 percent increase in printing presses to equal 2004 waste output levels. Furthermore, treatment facilities and landfills that receive waste from the WCF have not demonstrated an inability to take in and process waste (non-hazardous and hazardous) over time. Therefore, the Proposed Action would not result in a significant increase in waste generation beyond the capacity of processors and landfills that would result in a significant impact related to waste generation. Under the No Action Alternative, the Western Currency Facility's waste generation capabilities would not change from the existing condition and no impacts would occur.

MITIGATION AND MONITORING

The Proposed Action would not result in significant impacts to any of the resources analyzed in the EA. In order to ensure no significant impacts to archaeological resources occur during the construction phase of the Proposed Action, Mitigation Measure MM-CUL-1 would be implemented in the event that an archaeological resource is uncovered/disturbed.

MM-CUL-1: Inadvertent Archaeological Discoveries. In the event of the discovery of archaeological or paleontological materials, the construction manager shall immediately halt all work activities in the vicinity (within approximately 100 feet) of the discovery until it can be evaluated by a qualified archaeological and/or a Native American monitor or a qualified paleontologist as necessary.

If the qualified archaeologist and/or Native American Monitor or qualified paleontologist determines that any discovery constitutes a significant resource under NEPA, preservation in place is the preferred manner of mitigation. In the event preservation in place is demonstrated to be infeasible, and data recovery is determined to be the only feasible mitigation option, a detailed Resource Treatment Plan shall be prepared and implemented by a qualified archaeologist or paleontologist, as necessary, in consultation with the Facility Manager. The Facility Manager shall consult with appropriate Native American representatives in determining appropriate treatment for unearthed cultural resources if the resources are prehistoric or Native American in origin. Archaeological or paleontological materials recovered during any investigation shall be put into curation at an accredited facility.

SCOPING AND PUBLIC REVIEW

The BEP initially solicited comments on the Proposed Action from Federal, Tribal, State, and local governments in a letter dated 26 February 2018 (*Interagency Coordination and Consultations*, Appendix A of the EA). Comments received during the scoping period were addressed accordingly in the EA and are included as part of Appendix A.

NEPA, 40 CFR §§ 1500-1508, and 32 CFR Part 989 require that the public have an opportunity to review an EA before approval of a Finding of No Significant Impact (FONSI) and implementation of the Proposed Action. A Notice of Availability for public review of the Draft EA will be published in the *Fort Worth Star-Telegram* and the Draft EA will be made available for

public review at the Fort Worth Central Library located at 500 West Third Street, Fort Worth, Texas 76102-7305 to facilitate this opportunity for public review.

FINDING OF NO SIGNIFICANT IMPACT

Based on the Requirements of NEPA, 40 CFR §§ 1500-1508, and 32 CFR § 989, the BEP concluded that the environmental effects of implementing the Proposed Action would not be significant and, therefore, an Environmental Impact Statement will not be prepared.

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Acronyms

APE	Area of Potential Effect
AST	Aboveground Storage Tank
BEP	Bureau of Engraving & Printing
BMP	Best Management Practice
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CO	Carbon Dioxide
DCF	Washington, DC Facility
EA	Environmental Assessment
EIS	Environmental Impact Statement
ERCOT	Electric Reliability Council of Texas
ESA	Endangered Species Act
FONPA	Finding of No Practical Alternative
FONSI	Finding of No Significant Impact
GPD	Gallons Per Day
lbs	pounds
LOS	Level of Service
MAER	Maximum Allowable Emission Rate
MW	Megawatt
NAAQS	National Ambient Air Quality Standards
NCTCOG	North Central Texas Council of Governments
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System

NRHP	National Register of Historic Places
NO ₂	Nitrogen Dioxide
O ₃	Ozone
Pb	Lead
PM _{2.5}	Particulate Matter – 2.5 Microns in Diameter
PM ₁₀	Particulate Matter – 10 Microns in Diameter
ppb	Parts per billion
ppm	Parts per million
POL	Petroleum, Oil, and Lubricants
RCRA	Resource Conservation and Recovery Act
SDWA	Safe Drinking Water Act
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO ₂	Sulfur Dioxide
STP	Shovel Test Pit
TCEQ	Texas Commission on Environmental Quality
Treasury	United States Department of the Treasury
tpy	Tons per year
TxDOT	Texas Department of Transportation
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
USSS	United States Secret Service
UST	Underground Storage Tank
WCF	Western Currency Facility
µg/m ³	Micrograms per cubic meter

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1.0 Purpose and Need

This Environmental Assessment (EA), prepared in compliance with Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act (NEPA) (40 Code of Federal Regulations [CFR] § 1500-1508), evaluates potential environmental and human resource impacts associated with proposed construction, renovation, and demolition projects. Additionally, the EA is prepared in accordance with Department of the Treasury (Treasury) Directive 75-02 which sets forth the Treasury's policies, standards, and procedures for implementing NEPA. The EA presents a summary of existing conditions and analyses of potential environmental impacts associated with the proposed expansion of the Bureau of Engraving & Printing's (BEP's) Western Currency Facility (WCF) in Fort Worth, Texas.

1.1 INTRODUCTION

The U.S. Department of the Treasury's BEP office is responsible for the manufacturing of financial and other U.S. securities. Accordingly, the BEP designs, prints, and furnishes a large variety of security products; however, its primary function is the printing of Federal Reserve notes. The BEP prints 37 million notes with a face value of approximately \$696 million at facilities in Washington, DC, and Fort Worth, Texas, for delivery to the Federal Reserve System each day.

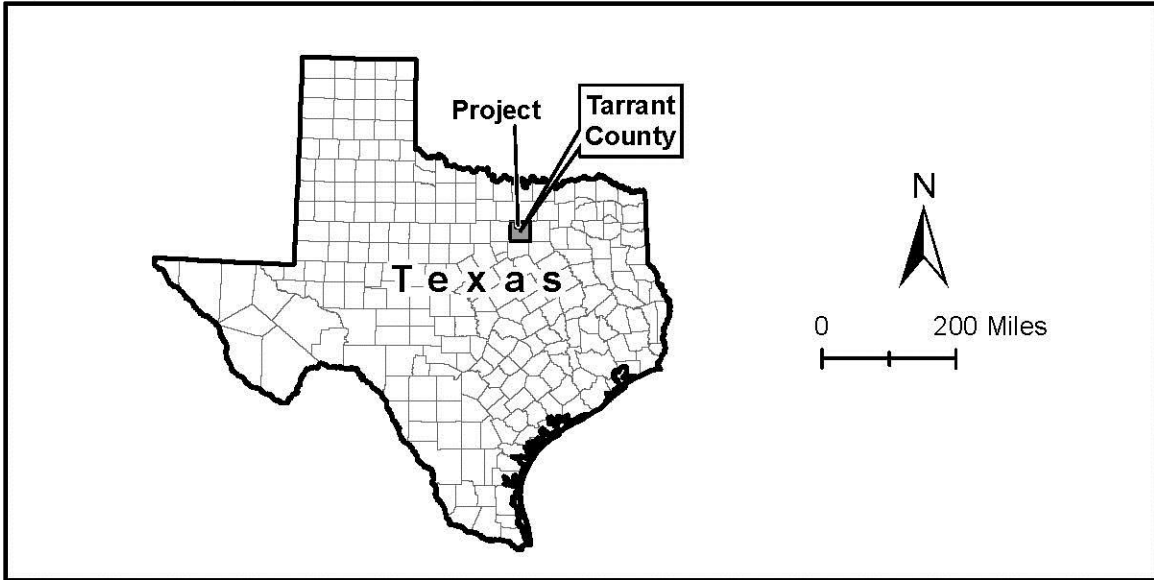
The BEP broke ground on the Fort Worth WCF in 1987 and produced its first currency in the 1990s in order to expand currency printing capabilities beyond the Washington, DC, facility and to increase efficiencies in currency transport to the western United States. The establishment of the Fort Worth WCF also provided secondary site redundancy to currency production. As part of BEP's continuing mission to ensure the security of U.S. currency by periodically enhancing its designs, BEP is proposing an expansion of the Fort Worth WCF that would allow for and implement production of the Next Generation of Currency design with new security features.

1.2 PROJECT LOCATION

The WCF is located within the city limits of Fort Worth in Tarrant County, Texas, and occupies approximately 100 acres of land in the northern half of the city, just north of the City of Saginaw. The WCF is bounded on the west by Blue Mound Road and by both existing and planned residential neighborhoods on the other three sides. The geographical coordinates of the property are centered at approximately 32°53'58.44" N latitude and 97°20'44.05" W longitude.

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2 **Figure 1-1 Regional Location Map, Western Currency Facility**



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1 **Figure 1-2 Current Aerial View of Western Currency Facility**



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1.3 PURPOSE AND NEED

Finalized in July 2003 by the BEP, the *Environmental Assessment of Production of the Next Generation of Currency – Western Currency Facility, Fort Worth, Texas (WCF) and Washington, DC Facility (DCF)* provides projections for growth and development of the BEP's currency printing installations to meet the demand for production of the Next Generation of Currency at that time, and that expansion was completed in 2004. The purpose of and need for implementing the proposed expansion of the WCF are currently envisioned as described below.

Purpose. The purpose of the Proposed Action is to maintain the security of the Federal Reserve notes through the production of a new currency design that provides improved security features (Next Generation of Currency). In order to meet production demands of new currency design, the BEP must expand production capability at the WCF.

Need. The Proposed Action is needed for the BEP to fulfill its responsibility to ensure the continued security of the U.S. currency. Although the counterfeiting of currency was substantially reduced after the establishment of the U.S. Secret Service (USSS), this crime still represents a potential danger to the nation's economy. Today, counterfeiting once again is on the rise. One reason is the ease and speed with which large quantities of counterfeit currency can be produced using modern photographic and printing equipment. According to the USSS, \$47.5 million in counterfeit currency entered circulation in fiscal year 2001. Of this amount, 39 percent was computer generated, compared to only 0.5 percent in 1995 (BEP 2003). In order to meet the demand for printing of the Next Generation of Currency, BEP's existing capabilities will be modified to accommodate the new designs. However, given development constraints at the DCF, the WCF has been identified to support expansion.

1.4 SUMMARY OF ENVIRONMENTAL STUDY REQUIREMENTS

NEPA requires that Federal agencies consider potential environmental consequences of proposed actions. The law's intent is to protect, restore, or enhance the environment through well-informed Federal decisions. The CEQ was established under NEPA for the purpose of implementing and overseeing Federal policies as they relate to this process. In 1978, the CEQ issued *Regulations for Implementing the Procedural Provisions of the National Environmental Policy Act* (40 CFR §1500-1508 [CEQ 1978]). These regulations specify that an EA be prepared to:

- Briefly provide sufficient analysis and evidence for determining whether to prepare an Environmental Impact Statement (EIS), Finding of No Practical Alternative (FONPA), or a Finding of No Significant Impact (FONSI);

- 1 • Aid in an agency’s compliance with NEPA when no EIS is necessary; and
2 • Facilitate preparation of an EIS when one is necessary.

3 Further, to comply with other relevant environmental requirements (e.g., the Endangered
4 Species Act [ESA] and National Historic Preservation Act [NHPA]) in addition to NEPA, and to
5 assess potential environmental impacts, the decision-making process for the Proposed Action
6 involves a thorough examination of all environmental issues pertinent to the Proposed Action.

1 **2.0 Description of Proposed Action and Alternatives**

2 **2.1 INTRODUCTION**

3 In order to fulfill the BEP’s responsibility to ensure the security of U.S. currency by
4 periodically enhancing the design of the currency through implementation of the mission of the
5 BEP, the BEP has proposed several facility expansions and improvements at the WCF.
6 Implementation of the Proposed Action would expand production, administrative, and supporting
7 spaces at locations throughout the WCF. This EA addresses the potential environmental
8 consequences that could result following the implementation of proposed expansion of and
9 improvements at the WCF. One alternative is addressed in this EA: the Proposed Action (i.e.,
10 Preferred Alternative) and Alternative 1, which is further described below. Additionally, CEQ
11 regulations stipulate that the No-Action Alternative must be analyzed to assess any environmental
12 consequences that may occur if the Proposed Action is not implemented.

13 **2.2 PROPOSED ACTION**

14 Existing facilities at the WCF do not meet all requirements to meet production demand for
15 the Next Generation of Currency. As described in Section 1, *Purpose and Need*, expansion of and
16 renovations at the WCF are necessary to meet BEP’s mission to ensure security of U.S. currency.
17 Implementation of the proposed expansion and improvements at the WCF would improve upon the
18 facility’s existing operations by providing state of the art facilities and equipment to support
19 modernized, secure printing and enhanced security features.

20 Proposed expansion and improvement projects are summarized in Table 2-1 and are
21 depicted in Figure 2-1.

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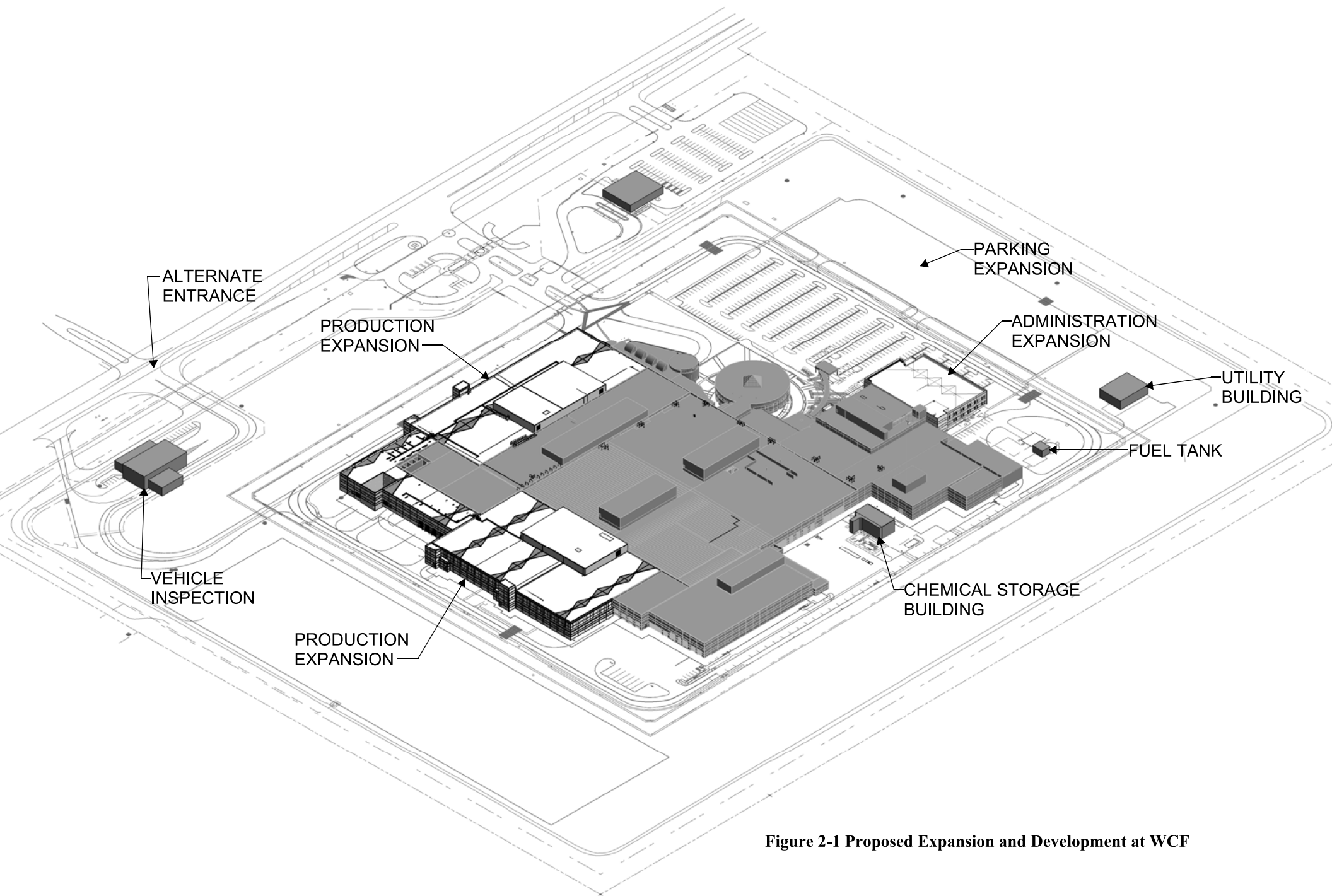


Figure 2-1 Proposed Expansion and Development at WCF

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2 **Table 2-1 Summary of Proposed Expansion and Improvement Efforts**

Project	Description/Scope
West Expansion	<ul style="list-style-type: none"> - Additional production space - 110,000 square feet (2.21 acres)
Southwest Expansion	<ul style="list-style-type: none"> - Expansion to support central plant and enclosed truck receiving area - 32,000 square feet (0.76 acre)
South Expansion	<ul style="list-style-type: none"> - Additional production space - 108,000 square feet (2.39 acres)
Alternate Entrance and Delivery Vehicle Inspection Facility	<ul style="list-style-type: none"> - New entrance and increased vehicle inspection capacity - 10,000 square foot vehicle inspection area in southwest portion of property
Parking Expansion	<ul style="list-style-type: none"> - Approximately 30-percent increase in parking spaces - 300 parking spaces (2.96 acres)
Administrative Expansion	<ul style="list-style-type: none"> - Two-story expansion to administrative section - 50,000 square feet
Utility Building	<ul style="list-style-type: none"> - Approximately 4,800-square foot, prefabricated, storage building - Located in northeast corner of proposed parking expansion
Underground Tank Removal and Relocation	<ul style="list-style-type: none"> - Removal of two 10,000-gallon underground diesel fuel tanks and replacement with aboveground storage tanks (ASTs) - New diesel AST would be located in northeastern portion of property
Flammable Liquid Storage Building	<ul style="list-style-type: none"> - New ~2,500-square foot consolidated chemical storage building and centralized distribution area

3 **2.3 ALTERNATIVES**4 **2.3.1 Alternative 1: No-Action Alternative**

5 Under the No-Action Alternative, proposed expansion and renovations summarized above
6 would not be implemented, the WCF would not be able to expand to accommodate the new
7 technology or security requirements for printing currency, and the Federal Reserve would not
8 receive the service or products it desires. Ultimately, the BEP would not be able to meet production
9 demand of the Next Generation of Currency and would not be able to accomplish its mission to
10 ensure security of U.S. currency. However, because CEQ regulations stipulate that the No-Action
11 Alternative be analyzed to assess any environmental consequences that may occur if the Proposed
12 Action is not implemented, this alternative will be carried forward for analysis in the EA. The No-
13 Action Alternative provides a baseline against which the Proposed Action can be compared.

2.4 ALTERNATIVES CONSIDERED BUT DISMISSED

2.4.1 Expand Existing DCF

The existing DCF was originally constructed in the 1800s, and it is located in an area that renders meeting the Purpose and Need of the Proposed Action infeasible (e.g., surrounding facilities and infrastructure significantly restrict the building's expansion potential).

2.4.2 Expand Existing WCF Vertically

The expansion of the existing WCF vertically (i.e., adding floors of operation above and/or below the existing structure) is not feasible because doing so would require a complete shutdown of existing operations for a period of time. The WCF is operational nearly 24 hours per day, 5 days per week, and 51 weeks per year, and production demand already exceeds capacity; therefore, halting production – no matter how temporarily – is not an alternative that would satisfy the Purpose and Need for the Proposed Action.

2.4.3 Construct a New Currency Production Facility

The identification of a new site that would facilitate construction of a third U.S. currency facility by the BEP was briefly contemplated but determined to be infeasible because the Treasury cannot directly purchase property without an act of the United States Congress (Article 1, Section 8, Clause 17, "Enclave Clause"). Further, there is sufficient space on-site to accommodate the proposed expansion, the existing 100-acre site in Fort Worth was donated to the Treasury in the 1980s by the City of Fort Worth and the existing facility occupies approximately 17 acres with 12.5 acres occupied by the facility structure and 4.5 acres by the existing employee parking lot. Other constraints associated with this alternative include the difficulties associated with locating a parcel of suitable size and without environmental constraints (e.g., land use compatibility and/or previously existing contamination concerns).

3.0 Affected Environment and Impacts

This chapter describes the environmental setting and discusses potential environmental impacts that may occur as a result of implementing the Proposed Action. The extent of information provided for each environmental resource is commensurate with the level of detail necessary to present the impacts analysis as it relates to the “importance of the resource are” as identified through the scoping process.

Per guidelines established by the NEPA, CEQ regulations, 32 CFR Part 989, *Environmental Impact Analysis Process*, and Department of the Treasury (Treasury) Directive 75-02, *Department of the Treasury NEPA Program*, the description of the affected environment and associated impact analyses in this EA focus on only those resource areas potentially subject to impacts as a result of implementation of the Proposed Action. Section 3.2, *Scoping and Environmental Review Considerations*, provides an explanation and a summary of resource areas eliminated from detailed analysis.

This EA addresses the environmental conditions and impact analyses for the following environmental resources that would likely be affected by the implementation of the Proposed Action at the BEP’s WCF in Fort Worth, Texas:

- Air Quality
- Transportation & Circulation
- Biological Resources
- Cultural Resources & Archaeology
- Water Resources
- Utilities & Infrastructure
- Hazardous Materials and Wastes

3.1 ASSESSMENT METHODOLOGY

To the greatest extent possible, discussions have been formulated in a manner to facilitate a comparison of the alternatives. Each section addressing an environmental subject area is organized into four primary subheadings:

- Setting – Provides baseline environmental information to support the impact analysis.
- Criteria of Significance – Defines the criteria used to determine the significance of potential impacts.
- Impacts – Describes the potential consequences to the particular subject area associated with each alternative. Impacts are categorized as:

- 1 ○ *No Impact*
- 2 ○ *Less than significant*
- 3 ○ *Significant but mitigable*
- 4 ○ *Significant and unavoidable*
- 5 ○ *Beneficial*

- 6 ➤ Mitigation – Identifies measures required to reduce significant impacts to a level of
- 7 less than significant.

8 **3.2 SCOPING AND ENVIRONMENTAL REVIEW CONSIDERATIONS**

9 As the Proposed Action consists of expanding the WCF structure, adding parking, and
10 adding a vehicle entrance, the analysis of impacts in this EA is focused on the environmental
11 conditions that would be affected by these activities.

12 **Noise:** Under the Proposed Action, there would be minor adverse impacts on ambient noise
13 during site preparation, grading, and construction activities. Impacts would be short-term and
14 minor because these activities would be carried out during normal working hours. The ambient
15 noise generated by the WCF following construction would be similar to existing conditions, and
16 no long-term noise impacts are anticipated. Therefore, no further discussion of noise impacts is
17 provided in this document.

18 **Geological Resources:** The WCF site is generally level topographically and is located in
19 a seismically inactive area that would not expose the facility to impacts from geological hazards.
20 Pursuant to geotechnical report prepared for the Proposed Action, construction of the proposed
21 facility expansion would not impact fossil-bearing geologic units that provide nearby Big Fossil
22 Creek its name including the Pawpaw Formation, Weno Limestone, and Denton Clay. Therefore,
23 no further consideration of impacts to geological resources or from geological hazards is provided
24 in this document.

25 **Safety:** The Proposed Action includes the addition of a new alternate entrance and vehicle
26 inspection area that will complement the existing security fencing, visitor entrance and inspection
27 area, and staff/delivery entrance inspection area. No further changes are proposed, or would be
28 needed, to maintain site safety and security. Therefore, no further consideration for site safety and
29 security is provided in this document.

30 **Environmental Justice:** The Proposed Action would result in negligible short-term
31 beneficial impacts at the WCF due to temporary employment during construction. No long-term
32 on-site or off-site adverse impacts to population, housing, or employment are anticipated at the
33 WCF. Therefore, no further consideration of environmental justice impacts is presented in this
34 document.

35 **Land Use:** The Proposed Action would result in minor, temporary changes in on-site land
36 use during construction (i.e., temporary contractor parking), all of which would be restricted to

1 areas within the existing WCF boundaries. All short-term and long-term development on-site
2 would be consistent with current land use as well as regional plans and zoning.

3 **3.3 AIR QUALITY**

4 Air quality in a given location is determined by the concentration of various pollutants in
5 the atmosphere. National Ambient Air Quality Standards (NAAQS) are established by the U.S.
6 Environmental Protection Agency (USEPA) for criteria pollutants, including: ground-level ozone
7 (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter equal
8 or less than ten microns in diameter (PM₁₀) and 2.5 microns in diameter (PM_{2.5}), and lead (Pb).
9 NAAQS represent maximum levels of background pollution that are considered safe, with an
10 adequate margin of safety, to protect public health and welfare (USEPA 2017).

11 Air quality is affected by stationary sources (e.g., urban and industrial development) and
12 mobile sources (e.g., motor vehicles). Air quality at a given location is a function of several factors,
13 including the quantity and type of pollutants emitted locally and regionally, and the dispersion rates
14 of pollutants in the region. Primary factors affecting pollutant dispersion are wind speed and
15 direction, atmospheric stability, temperature, the presence or absence of inversions, and
16 topography.

17 The Clean Air Act (CAA) Amendments of 1990 place most of the responsibility to achieve
18 compliance with NAAQS on individual states. To this end, USEPA requires each state to prepare
19 a State Implementation Plan (SIP). A SIP is a compilation of goals, strategies, schedules, and
20 enforcement actions that will lead the state into compliance with all NAAQS. Areas not in
21 compliance with a standard can be declared *nonattainment* areas by USEPA or the appropriate state
22 or local agency. In order to reach *attainment*, NAAQS may not be exceeded more than once per
23 year (USEPA 2017).

24 NAAQS are enforced by the states via local air quality agencies. States may choose to
25 adopt their own air quality standards, but state standards must be at least as stringent as federal
26 standards. Texas has adopted the federal standards as the state standards, and these standards are
27 enforced by the Texas Commission on Environmental Quality (TCEQ). Table 3-1 presents the
28 NAAQS.

29 The USEPA General Conformity Rule (40 CFR 93, Subpart B for federal agencies and 40
30 CFR 51, for state requirements) requires all federal agencies to ensure that any agency action or
31 activity conforms to an approved SIP. This applies only to federal actions in *nonattainment* or
32 *maintenance* areas. The General Conformity Rule requires analysis of total direct and indirect
33 emissions of criteria pollutants, including precursors, when determining conformity of the
34 Proposed Action. The Rule applies if the Proposed Action's emissions would be greater than 10
35 percent of an area's total emissions of a given pollutant, and are considered "regionally significant"
36 or emissions exceed *de minimis* thresholds. If *de minimis* thresholds are exceeded, a conformity
37 determination shall be made.

1

Table 3-1 National Ambient Air Quality Standards

Criteria Pollutant	Time Basis	Primary Standards	Violation Criteria
Ozone (O ₃)	8-hour	0.07 ppm	Annual 4 th -highest daily maximum 8-hour concentration, averaged over 3 years
<u>Particulate Matter</u>			
PM _{2.5}	1-year	12 µg/m ³	Annual mean, averaged over 3 years
	24-hours	35 µg/m ³	98 th percentile, averaged over 3 years
PM ₁₀	24-hours	150 µg/m ³	Not to be exceeded more than once per year on average over 3 years
Carbon Monoxide (CO)	1-hour	35 ppm	More than 1 day/year
	8-hour	9 ppm	More than 1 day/year
Nitrogen Dioxide (NO ₂)	1-hour	100 ppb	98 th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	1-year	53 ppb	Annual mean
Lead (Pb)	Rolling 3-month average	0.15 µg/m ³	Not to be exceeded
Sulfur Dioxide (SO ₂)	1-hour	75 ppb	99 th percentile of 1-hour daily maximum concentrations, averaged over 3 years

2

ppm = parts per million

ppb = parts per billion

3

PM₁₀ = equal to or less than 10 micronsPM_{2.5} = equal to or less than 2.5 microns

4

µg/m³ = micrograms per cubic meter

5

These “Primary standards” provide for protection of public health, including the health of sensitive populations such as asthmatics, children, and the elderly. States work with the USEPA to monitor locations in urban and rural settings to characterize local air quality over time. When sufficient data are collected, the USEPA will designate an area as attainment or nonattainment for each of the above listed standards. If the air quality in a geographic area meets or is cleaner than the national standard, it is called an attainment area; areas that do not meet the national standard are called nonattainment areas. In some cases, the USEPA is not able to determine an area’s status after evaluating the available data and these areas are designated unclassifiable.

12

13

3.3.1 Setting

14

Fort Worth has a humid, subtropical climate with continental influence which results in a wide annual temperature range and variable precipitation, ranging from less than 20 inches to more than 50 inches per year. Typically, summers are hot while winters are mild with occasional, short-lived periods of extreme cold. Thunderstorms occur throughout the year but are most common in the spring (National Weather Service 2017).

18

1 The WCF is located in the ten-county Dallas-Fort Worth geographic area monitored by the
2 USEPA that includes Tarrant County. Tarrant County is currently in *moderate nonattainment* for
3 ozone as of 2012, having improved from a *serious nonattainment* designation in 2011 (TCEQ
4 2017).

5 The TCEQ has issued both Permits by Rule and New Source Review Permit No. 17994,
6 including subsequent amendments, to the BEP to address the greater than *de minimis* air emissions
7 of the WCF resulting from currency production. Permit No. 17994 includes Maximum Allowable
8 Emission Rates (MAERs) for the whole facility and individual equipment types and special
9 conditions governing emissions. The MAER sheet, dated April 25, 2017, permits the WCF to emit
10 a total of up to 25 tons per year of NAAQS criteria pollutants with no one pollutant permitted to
11 exceed 10 tons per year (Appendix B). Beyond NAAQS criteria pollutants, the WCF's Potential to
12 Emit for Volatile Organic Compounds is approximately 45 tons per year. Waste paper generated
13 at WCF is shredded and disposed of off-site; however, initial processing of waste paper including
14 shredding and baghouse packaging is the WCF's largest contribution to particulate matter
15 emissions occurs on-site.

16 3.3.2 Criteria of Significance

17 The Proposed Action or an alternative would have a significant impact on air quality if it
18 would cause any of the following consequences:

- 19 ➤ Cause or contribute to any new violation of any NAAQS in the area.
- 20 ➤ Interfere with provisions in the SIP for maintenance or attainment of any NAAQS.
- 21 ➤ Increase the frequency or severity of any existing violation of any NAAQS.
- 22 ➤ Delay timely attainment of any NAAQS.

23 3.3.3 Impacts

24 No Action Alternative

25 Under the No Action Alternative, expansion of the WCF would not take place. There
26 would be no change to the WCF's output of any criteria pollutant. Therefore, there would be no
27 impact to air quality.

28 Proposed Action

29 Under the Proposed Action, implementation of expansion to the WCF would occur,
30 including increased administrative area and printing space to meet the requirements for future
31 printing capabilities. In the short-term, construction activities to implement the Project would
32 potentially result in temporary, but measurable, increases in criteria pollutants such as O₃, CO,

1 PM_{2.5}, and PM₁₀. An estimated construction period of 25 months, employing 340 construction
 2 workers at peak, that would include the construction of a temporary contractor parking/lay down
 3 area; the West Expansion, Southwest Expansion, and South Expansion; temporary
 4 construction/alternative facility entrance, and new vehicle inspection station would result in the
 5 following estimated fugitive dust by year, construction equipment emissions, and construction
 6 worker commute emissions (Appendix B).

7 **Table 3-2 Projected Fugitive Dust Emissions by Year**

Year	Estimated Disturbed Acreage	Potential Dust Generated per Year (tpy)	Potential Dust Generated per Year with BMPs (tpy)
2018	7.40	33.30	16.65
2019	6.89	25.91	12.96
2020	2.82	10.62	5.31
2021	1.03	3.89	1.94

8 tpy = tons per year

9 **Table 3-3 Projected Construction Equipment Operation Emissions by Year**

Year	CO (tpy)	NOx (tpy)	PM (tpy)	SOx (tpy)	VOC (tpy)
2018	0.100	0.200	0.011	< 0.001	0.027
2019	0.688	1.376	0.002	0.189	0.075
2020	0.352	0.705	0.038	0.001	0.038
2021	0.070	0.139	0.008	< 0.001	0.019

10 **Table 3-4 Project Construction Worker Commute Emissions by Year**

Year	CO (tpy)	NOx (tpy)	PM (tpy)	SOx (tpy)	VOC (tpy)
2018	1.929	0.194	0.203	0.025	0.003
2019	5.787	0.581	0.608	0.074	0.009
2020	5.787	0.581	0.608	0.074	0.009
2021	2.170	0.218	0.228	0.028	0.003

11 With respect to the General Conformity Rule, effects on air quality would be considered
 12 significant if a proposed action would result in emissions that exceed *de minimis* threshold levels
 13 established in 40 CFR 93.153(b) for individual pollutants in nonattainment or maintenance areas.

14 Tarrant County is currently in moderate nonattainment for ozone having improved from a
 15 serious nonattainment designation in 2011. However, fugitive dust resulting from activities related
 16 to implementation of the Proposed Action could be reduced through standard dust minimization
 17 practices (e.g., regularly watering exposed soils, soil stockpiling, etc.). These dust minimization
 18 measures can reduce dust generation by up to 50 percent (USEPA 2006). Although any substantial
 19 increase in fugitive dust emissions is inherently adverse, increased fugitive dust emissions

1 associated with the Proposed Action would be short-term and temporary, resulting in less than
2 significant impacts to air quality.

3 Emissions associated with construction equipment (e.g., grader, backhoe, 1 dozer, etc.)
4 would be minimal because most equipment would be driven to and kept at the WCF for the duration
5 of construction activities (Tables 3-2, 3-3, and 3-4). Emissions associated with construction worker
6 commutes and the transportation of materials would also be minimal given the temporary nature of
7 the activities (Table 3-4). Impacts due to combustion emissions from construction are generally
8 not considered significant because they are temporary and of short duration. While Tarrant County
9 is in *moderate nonattainment* for ozone, anticipated combustion emissions during construction
10 activities would remain below *de minimis* threshold values and result in less than significant short-
11 term impacts to air quality.

12 Emissions associated with existing operational capacity of the facility (e.g. additional
13 printing presses) are regulated by Air Quality Permit No. 17994 and Permits by Rule issued by
14 TCEQ and are currently required to not exceed a total of 25 tons per year of all types of criteria
15 pollutants with no one pollutant permitted to exceed 10 tons per year. While the exact number and
16 capacity of additional emissions sources is not currently known, the total expansion area would
17 restrict additional production capacity to less than double which would ensure that the future annual
18 air emissions from the WCF would not exceed any of the established *de minimis* standards resulting
19 in a significant impact.

20 **3.3.4 Mitigation**

21 With regard to air quality, no significant impacts would result from implementation of the
22 Proposed Action. Short-term, temporary impacts related to site preparation and construction
23 activities would be offset via implementation of best management practices (BMPs) such as soil
24 stockpiling / watering. Long-term, operational impacts would be negligible on a regional scale
25 and would not contribute to or exacerbate air quality issues in Tarrant County or in the Dallas-Fort
26 Worth geographic area. Therefore, no mitigation measures would be required to reduce the level
27 of air quality impacts to less than significant.

28 **3.4 TRANSPORTATION AND CIRCULATION**

29 Transportation and circulation refers to the movement of vehicles throughout a road or
30 highway network. Primary roads include principal arterials, such as major interstates, designated
31 to move traffic and not necessarily to provide access to all adjacent areas. Secondary roads include
32 arterials, such as rural, farm to market, routes and major surface streets, which provide access to
33 residential and commercial areas, hospitals, and schools.

3.4.1 Setting

The WCF is located at 9000 Blue Mound Road in the northern metropolitan area of the City of Fort Worth, Tarrant County, Texas. Access to the interstate highway system from the WCF is available either via Blue Mound Road north to Highway 287 and southeast to I-35W (approximately 3.7 miles) or via Blue Mound Road south to I-820 (approximately 4 miles). Blue Mound Road is a north-south oriented, two-lane arterial road that connects U.S. Highway 87 and U.S. Interstate 820. The North Central Texas Council of Governments (NCTCOG) maintains a database of traffic counts for specific locations within their jurisdiction including Tarrant County. A series of traffic counts recorded combined, 24-hour, bi-directional traffic counts most recently on June 24, 2013 at three points in the vicinity of the WCF including: along Blue Mound Road near intersection with Heritage Trace Parkway, along Blue Mound Road south of Harmon Road, and along Harmon Road east of Blue Mound Road (Table 3-5) (NCTCOG, 2017).

Table 3-5 2013 Traffic Counts in Vicinity of WCF

Road Segment	Location	Total Traffic Count	AM Peak (6:00 to 9:00)	PM Peak (4:00 to 6:00)
Blue Mound Road	Between U.S. Highway 81 and Harmon Road	10,712	2,221	1,917
Blue Mound Road	Between Harmon Road and Bailey Road	18,641	3,613	3,190
Harmon Road	Between Blue Mound Road and U.S. Highway 81	9,122	1,683	1,509

The Texas Department of Transportation (TxDOT) is currently planning to widen the existing roadway to a four-lane roadway with a raised median with curb and gutter and an estimated completion date of 2020 (TxDOT, 2016).

Staff, contractors, and transport vehicles arrive via a secured entrance off of Blue Mound Road. Visitors arrive at a second entrance north of the main entrance via personal vehicle or tour bus, park in a lot separate from the staff parking lot with space for approximately 100 cars and 20 buses, and are then transferred to the WCF Visitor's Center via electric-powered trams.

Currently, the WCF employs approximately 800 Federal employees and 600 contractors who typically work three shifts Monday through Friday with half of the employees working first shift and the remaining half split evenly between second and third shifts.¹ Generally, employees arriving at the WCF for first shift would arrive during the AM peak hours of traffic, 6:00 to 9:00 AM, and departing prior to the PM peak hours, 4:00 to 6:00 PM; employees arriving for second shift would arrive prior to the PM peak hours, and departing during non-peak hours; and employees arriving for third shift would arrive outside of the peak hours but depart during the AM peak hours.

¹ Approximately 20 contractors arrive and depart via public transportation for the first shift while it is assumed that all other employees arrive and depart in personal vehicles.

1 The most conservative estimate of peak hour traffic volumes contributed to the local road network
 2 by the WCF would assume that all employees, except the 20 contractors arriving via public
 3 transportation, arrive and depart the WCF in their own personal vehicles (Table 3-6).

4 **Table 3-6 WCF Contribution to Local Peak Hour Traffic**

Shift	Time	Employees	AM Peak Contributor?	PM Peak Contributor?
1 st Shift	6:00-8:00 AM to 2:00-3:00 PM	680	Yes	No
2 nd Shift	2:00-3:00 PM to 10:00-11:00 PM	350	No	No
3 rd Shift	10:00-11:00 PM to 6:00-8:00 AM	350	Yes	No

5 Therefore, the existing facility contributes 1,030 AM peak hour trips and no PM peak hour
 6 trips that are included in the totals for the local road network as described in Table 3-5.

7 **3.4.2 Criteria of Significance**

8 The Proposed Action or an alternative would have a significant impact on transportation
 9 and circulation if it would cause any of the following consequences:

- 10 ➤ Permanently degrade the level of service (LOS) on adjacent roadways or intersections due
 11 to the generation of additional vehicle trips or altered traffic patterns.
- 12 ➤ Result in safety hazards for pedestrian traffic due to the generation of additional vehicle
 13 trips or altered traffic circulation patterns.
- 14 ➤ Permanently remove a substantial number of parking spaces.
- 15 ➤ Substantially conflict with goals or policies of the BEP.

16 **3.4.3 Impacts**

17 **No Action Alternative**

18 Under the No Action Alternative, implementation of expansion to the WCF would not take
 19 place. There would be no change to WCF-related traffic demand associated with increase output
 20 and associated increased employee traffic. Therefore, there would be no impact to traffic and
 21 circulation.

1 **Proposed Action**

2 Under the Proposed Action, a new delivery-only entrance with inspection station would be
 3 constructed providing a third entrance to the facility from Blue Mound Road. Additionally, existing
 4 staff parking would be expanded by 300 spaces in order to accommodate additional employees
 5 associated with the expanded printing and administrative requirements to meet new currency design
 6 guidelines. Employees would continue to enter the facility via the existing entrance. The proposed
 7 expansion of the facility including the expanded parking lot would support an approximate 10
 8 percent increase in staffing at the facility across all shifts.

9 **Table 3-7 Projected WCF Contribution to Local Peak Hour Traffic**

Shift	Time	Employees/Trips	AM Peak Contributor?	PM Peak Contributor?
1 st Shift	6:00-8:00 AM to 2:00-3:00 PM	748	Yes	No
2 nd Shift	2:00-3:00 PM to 10:00-11:00 PM	385	No	No
3 rd Shift	10:00-11:00 PM to 6:00-8:00 AM	385	Yes	No

10 Therefore, the Proposed Action would result in an additional 103 AM peak hour trips and
 11 no additional PM peak hour trips to the local road network which already supports approximately
 12 2,221 AM peak hour and 1,917 PM peak hour trips north of the WCF along Blue Mound Road and
 13 5,296 AM peak hour trips and 5,107 PM peak hour trips south of the WCF along Blue Mound Road
 14 and Harmon Road (Table 3-2). If it is assumed that trips arriving and departing from the WCF are
 15 divided evenly between north and south, the percentile contribution of the expanded facility would
 16 be:

- 17 • 2.0 percent increase in AM peak hour trips along Blue Mound Road north of the
 18 WCF; and
- 19 • 1.0 percent increase in AM peak hour trips along Blue Mound Road and Harmon
 20 Road south of the WCF.

21 The Proposed Action would not make a significant contribution to additional traffic along
 22 Blue Mound Road when compared to the existing baseline traffic levels along this stretch of
 23 roadway. Therefore, the Proposed Action would result in a less than significant impact to the local
 24 roadway network.

25 **3.4.4 Mitigation**

26 With regard to transportation and circulation, no significant impacts would result from
 27 implementation of the Proposed Action. Short-term, temporary impacts related to site preparation
 28 and construction activities would be offset via implementation of BMPs. Long-term operational

1 impact would be negligible on a regional scale and would not contribute to or exacerbate
2 transportation and circulation issues in the project vicinity or in the Dallas-Fort Worth geographic
3 area. Therefore, no mitigation measures would be required to reduce the level of transportation
4 and circulation impacts to less than significant.

5 **3.5 BIOLOGICAL RESOURCES**

6 Biological resources include native or naturalized plants and wildlife and the habitats in
7 which they occur. Sensitive biological resources are defined as those plant and wildlife species
8 listed as threatened or endangered, or proposed as such, by the U.S. Fish and Wildlife Service
9 (USFWS). The Federal Endangered Species Act (ESA) of 1973 protects listed species against take,
10 which includes killing, harming, harassing, or any action that may damage their habitat. Federal
11 Candidate species receive no statutory protection under the ESA; however, cooperative
12 conservation of these species is encouraged because they are, by definition, species that may
13 warrant future protection under the ESA.

14 **3.5.1 Setting**

15 During a site visit conducted in October 2017, a tour of the facility and the immediate
16 surrounding area was completed. The area within the current fenceline comprises either impervious
17 cover or mowed turf with scattered trees, most of which were planted when the facility was built
18 or in the time that has elapsed since initial construction. The area outside the fenceline but within
19 the property boundary is also mowed to the boundary, but was not quite as heavily maintained turf.

20 Although a few of the taller trees located onsite could serve as perches for the occasional
21 raptor, no suitable wildlife habitat was observed. Some rodents and a few birds may utilize the turf
22 grass areas occasionally, but these would not be considered sensitive species.

23 There were limited drainage ditches on site; however, they did not connect to a natural
24 channel and no other indicators of wetlands were observed.

25 **3.5.2 Criteria of Significance**

26 The Proposed Action or an alternative would have a significant impact on biological
27 resources if it would cause any of the following consequences:

- 28 ➤ Result in a take of any plant or wildlife species that is listed as threatened or endangered.
- 29 ➤ Permanently alter habitat capable of supporting or known to support protected species.

3.5.3 Impacts

No Action Alternative

Under the No Action Alternative, implementation of expansion to the WCF would not take place. There would be no short-term construction-related impacts or long-term operational changes to the facility that would impact biological resources. Therefore, there would be no impact to biological resources.

Proposed Action

Under the Proposed Action, ground-disturbing construction activities would occur associated with the expansion of the WCF. However, given the absence of sensitive species and habitat areas, no significant impacts to biological resources would result from implementation of the Proposed Action.

3.5.4 Mitigation

No mitigation is required.

3.6 ARCHAEOLOGICAL AND HISTORIC RESOURCES

Cultural resources represent and document activities, accomplishments, and traditions of previous civilizations and link current and former inhabitants of an area. Depending on their conditions and historic use, these resources may provide insight to living conditions in previous civilizations and may retain cultural and religious significance to modern groups.

Archaeological resources comprise areas where prehistoric or historic activity measurably altered the environment or deposits of physical remains (e.g., arrowheads, bottles) discovered therein. Architectural resources include standing buildings, districts, bridges, dams, and other structures of historic or aesthetic significance. Architectural resources generally must be more than 50 years old to be considered for inclusion in the National Register of Historic Places (NRHP), an inventory of culturally significant resources identified in the U.S.; however, more recent structures, such as Cold War-era resources, may warrant protection if they have the potential to gain significance in the future. Traditional cultural resources can include archaeological resources, structures, neighborhoods, prominent topographic features, habitats, plants, animals, and minerals that that Native Americans or other groups consider essential for the persistence of traditional culture.

The principal federal law addressing cultural resources is the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC Section 470), and its implementing regulations (36 CFR 800). The regulations, commonly referred to as the Section 106 process, describe the procedures for identifying and evaluating historic properties; assessing the effects of

1 federal actions on historic properties; and consulting to avoid, reduce, or minimize adverse effects.
2 As part of the Section 106 process, agencies are required to consult with the State Historic
3 Preservation Office (SHPO).

4 The term “historic properties” refers to cultural resources that meet specific criteria for
5 eligibility for listing on the NRHP; historic properties need not be formally listed on the NRHP.
6 Section 106 of the NHPA does not require the preservation of historic properties, but ensures that
7 the decisions of federal agencies concerning the treatment of these places result from meaningful
8 considerations of cultural and historic values and of the options available to protect the properties.
9 The Proposed Action is an undertaking as defined by 36 CFR 800.3 and is subject to requirements
10 outlined in Section 106 of the NHPA.

11 **3.6.1 Setting**

12 **Archaeological and Historic Resources**

13 A Phase I archaeological resource survey was completed on October 16, 2017, for proposed
14 areas of disturbance including the Parking Expansion, West Expansion, Southwest Expansion,
15 South Expansion, and Contractors Access. The entire survey area was investigated with pedestrian
16 and subsurface survey including 57 shovel test pits (STPs) excavated across the entire survey area.
17 No archaeological resources were identified.

18 Historic maps including the 1894 Fort Worth, Texas and the 1955 and 1968 Keller, Texas
19 USGS topographic quadrangles along with the 1968 aerial map were reviewed, and according to
20 the map research, it was determined that a residence/farmstead with multiple structures was shown
21 in the Western Expansion portion of the project area. No evidence of the remains of the
22 residence/farmstead shown on the 1968 map was identified.

23 **Historic Architecture**

24 A historic architectural survey of the WCF was conducted on October 16, 2017, in order
25 to assess potential adverse direct and visual impacts on one building, the WCF, which dates to 1988
26 (Appendix B). As the structure is less than 50 years old, the WCF was evaluated under Criterion
27 Consideration G within the context of exceptional importance. The structure is recommended as
28 not eligible for inclusion on the NRHP according to the four NRHP criteria for historic architectural
29 significance

30 Under Criterion A, this facility produces 2/3 of the country’s currency and is one of only
31 two BEP facilities in the United States. The building has been in operation since 1990 and
32 represents a significant facility for the Department of the Treasury. However, the building has been
33 altered since it was originally constructed. These alterations have led to a loss of character-defining
34 features on both the interior and exterior of the building. Though the location of the facility has
35 remained the same since the building was originally constructed in 1988, the design, setting,

1 materials, workmanship, feeling, and associated character have all been negatively impacted. As
2 such though the building has begun to exhibit minor importance under Criterion A, it lacks the
3 “exceptional” importance required by buildings under 50 years of age as prescribed under Criterion
4 Consideration G. While the facility can be associated with House Speaker Jim Wright and local
5 businessman William “Bill” Harvey, these individuals were associated with a multitude of projects
6 during this time and do not reflect exceptional or singular importance in regard to the WCF. Under
7 Criterion C, the building lacks architectural significance and integrity of workmanship, material,
8 and design as it does not represent an originally preserved or significant example of Post Modern
9 architecture due to the extensive amount of alterations that have been conducted. Under Criterion
10 D, the facility is recommended not eligible since it does not yield, or is likely to yield, information
11 important to history. Based on these findings, the WCF is not recommended for inclusion on the
12 NRHP.

13 **3.6.2 Criteria of Significance**

14 The Proposed Action or an alternative would have a significant impact on cultural
15 resources and archaeology if it would cause any of the following consequences:

- 16 ➤ Destroy or otherwise adversely impact the integrity of any known or unknown
17 archaeological resource.
- 18 ➤ Disrupt the integrity, including original form, function, and mission of structure or place
19 considered eligible for inclusion on the National Register of Historic Places.

20 **3.6.3 Impacts**

21 **No Action Alternative**

22 Under the No Action Alternative, implementation of expansion to the WCF would not take
23 place. There would be no construction-related, ground disturbing activities at the WCF that would
24 potentially impact cultural resources. Therefore, there would be no impact to cultural resources
25 and archaeology.

26 **Proposed Action**

27 **Archaeological and Historic Resources**

28 As discussed in *Section 3.6.1 – Setting*, the Phase I research and survey for archaeological
29 and historic resources did not discover any evidence of archaeological resources or the
30 residence/farmstead that previously stood on the site. Therefore, it is unlikely that the Proposed
31 Action, including ground-disturbing construction activities would negatively impact these
32 resources and no significant impacts would occur.

1 Historic Architecture

2 There would be direct physical and visual impacts to the WCF under the Proposed Action.
3 However, while the material integrity of the facility will be impacted, the Proposed Action would
4 not negatively impact the “historic” integrity of the site as the facility does not currently meet any
5 of the four criteria under Criterion Consideration G for inclusion on the NRHP. Therefore, the
6 Proposed Action would not negatively impact the WCF’s form, function, and mission and would
7 not change the location, setting, feeling, workmanship, or association of the WCF in a manner that
8 would preclude it from future inclusion on the NRHP, and no impacts would occur.

9 **3.6.4 Mitigation**

10 With regard to archaeological resources, no significant impacts would result from
11 implementation of the Proposed Action. Short-term, temporary impacts related to site preparation
12 and construction activities would have the potential to result in unanticipated discovery of
13 archaeological resources. Long-term, operation of the facility post-construction would not
14 contribute to further impacts to archaeological resources in the Dallas-Fort Worth geographic area.
15 Implementation of a mitigation measure for cultural resources (MM-CUL-1) would ensure that in
16 the case of unanticipated discovery of archaeological resources, those resources are protected and
17 impacts reduced to a less than significant level.

18 MM-CUL-1: Inadvertent Archaeological Discoveries. In the event of the discovery of
19 archaeological or paleontological materials, the construction manager shall immediately halt all
20 work activities in the vicinity (within approximately 100 feet) of the discovery until it can be
21 evaluated by a qualified archaeological and/or a Native American monitor or a qualified
22 paleontologist as necessary.

23 If the qualified archaeologist and/or Native American Monitor or qualified paleontologist
24 determines that any discovery constitutes a significant resource under NEPA, preservation in place
25 is the preferred manner of mitigation. In the event preservation in place is demonstrated to be
26 infeasible, and data recovery is determined to be the only feasible mitigation option, a detailed
27 Resource Treatment Plan shall be prepared and implemented by a qualified archaeologist or
28 paleontologist, as necessary, in consultation with the Facility Manager. The Facility Manager shall
29 consult with appropriate Native American representatives in determining appropriate treatment for
30 unearthened cultural resources if the resources are prehistoric or Native American in origin.
31 Archaeological or paleontological materials recovered during any investigation shall be put into
32 curation at an accredited facility.

33 **3.7 WATER RESOURCES**

34 Water resources include surface water and groundwater. Surface water resources comprise
35 lakes, rivers, and streams and are important for a variety of reasons including ecological, economic,
36 recreational, aesthetic, and human health. Groundwater comprises the subsurface hydrologic

1 resources of the physical environment and is an essential resource in many areas; groundwater is
2 commonly used for potable water consumption, agricultural irrigation, and industrial applications.

3 Water and wastewater supply and demand include potable water supply for municipal and
4 industrial use at the WCF and wastewater removed from the site includes sewage and liquid
5 materials that are byproducts of the printing process that are safe for delivery to the sewer system
6 instead of removal from the site as described in Section 3.9 – *Solid Waste, Hazardous Materials,*
7 *and Hazardous Waste.*

8 **3.7.1 Setting**

9 **Water Resources**

10 The nearest surface waterbody to the WCF is Loughridge Lake on Big Fossil Creek,
11 approximately 0.5 mile from the WCF and is separated by existing development and roadways

12 **Water and Wastewater Supply and Demand**

13 The WCF receives potable water supply from City of Fort Worth Water Department which
14 supplies water throughout the City of Fort Worth. City of Fort Worth Water Department currently
15 supplies municipal water to more than 1.2 million people with a treatment capacity of 497 million
16 gallons per day (GPD) (City of Fort Worth, 2017a).

17 Wastewater generated by the WCF is discharged to the City of Fort Worth's Village Creek
18 Wastewater Treatment Plant which serves 880,000 people and is capable of processing 166 million
19 GPD of wastewater (City of Fort Worth, 2017b). In 2002, the peak daily wastewater flow rate from
20 the WCF to Village Creek Wastewater Treatment Plant was 194,000 GPD or 0.13 of the 2002
21 capacity of the facility (approximately 144 million GPD).

22 **3.7.2 Criteria of Significance**

23 An alternative would have a potentially significant impact on water resources if it would:

- 24 ➤ Create a new industrial-related stormwater discharge.
- 25 ➤ Result in ground-disturbing activities or direct discharges to surface waters or
26 waters of the United States.
- 27 ➤ An alternative would have a potentially significant impact on water supply if it
28 would:
- 29 ➤ Cause the need for a local municipality to construct new water facilities or
30 substantially expand existing facilities, the construction of which could cause
31 significant environmental effects.

1 ➤ Substantially deplete groundwater supplies or interfere with groundwater recharge
2 such that there would be a net deficit in aquifer volume or a lowering of the local
3 groundwater table levels that would adversely affect local wells.

4 ➤ Fail to provide an adequate supply of safe drinking water in accordance with the
5 Safe Drinking Water Act (SDWA) and local health organization requirements.

6 An alternative would have a potentially significant impact on wastewater facilities if it
7 would:

8 ➤ Directly result in the need for the local provider to construct new wastewater
9 treatment facilities or expand existing facilities.

10 ➤ Result in determination by the wastewater treatment provider that it cannot
11 adequately serve the projects' projected load in addition to the provider's existing
12 commitments.

13 ➤ Overload collection systems or otherwise cause the collection system to fail or result
14 in surcharges.

15 ➤ Otherwise result in violation of the wastewater treatment plant National Pollutant
16 Discharge Elimination System (NPDES) permit.

17 **3.7.3 Impacts**

18 **No Action Alternative**

19 Under the No Action Alternative, implementation of expansion to the WCF would not take
20 place. There would be no change to water demand or generation of wastewater. Therefore, there
21 would be no impact to water resources.

22 **Proposed Action**

23 Under the Proposed Action, ground-disturbing activities associated with the expansion of
24 the WCF would occur. The project site does not occupy any designated or potential wetland
25 features and is separated from any nearby surface waterbodies (i.e., Loughridge Lake and Big Fossil
26 Creek) by Blue Mound Road and other roadways equipped with drainages that would prevent direct
27 discharge from the WCF to these surface waterbodies. Implementation of construction BMPs to
28 control surface water flows during construction and potential precipitation events which may
29 include sediment control measures and spill prevention and immediate clean up would prevent
30 discharges into any surface waterbody and would also prevent local impacts to subsurface
31 groundwater deposits.

1 The expanded facility and associated expanded printing capability and additional 140
2 employees would not generate additional water demand that would exceed the capacity of Fort
3 Worth Water to supply. As an example, the WCF would need to increase total water demand by
4 2.5 million GPD to represent one percent of the daily water service of Fort Worth Water. Given
5 that prior reporting of water usage at the WCF was expected to be 184,750 GPD in 2004, or less
6 than one tenth of 2.5 million GPD.

7 The expanded facility and associated expanded printing capacity and additional 140
8 employees would not generate additional wastewater that would exceed the capacity of the Village
9 Creek Wastewater Treatment Plant. As an example, the WCF would need to discharge nearly two
10 million additional gallons per day to utilize an additional one percent of the 2017 capacity of the
11 Village Creek Wastewater Treatment Plant. Therefore, the Proposed Action would have a less than
12 significant impact on water resources, water supply, and wastewater supply.

13 **3.7.4 Mitigation**

14 No mitigation necessary.

15 **3.8 UTILITIES & INFRASTRUCTURE**

16 Utilities and infrastructure consist of systems and physical structures that enable a
17 population in a specified area to function. Utilities include infrastructure that supports facility
18 operations, including electricity or telecommunications. Utilities also include on-site utility
19 production, such as power generation or wastewater treatment. Services comprise functions
20 provided to a facility by public agencies or by a facility to the community. Such services may
21 include police and fire protection, water and solid waste service, sanitary sewer and wastewater
22 treatment, and recreational facilities.

23 **3.8.1 Setting**

24 The current utility infrastructure at the WCF includes electrical power, natural gas, and
25 potable water (Discussed in *Section 3.7 – Water Resources*).

26 **Electrical**

27 The Electric Reliability Council of Texas (ERCOT) manages the electrical grid within the
28 State of Texas, one of three national grids including the Eastern and Western Interconnections.
29 ERCOT carries approximately 75 percent of the electrical load within the state over more than
30 40,000 miles of transmission line and over 550 generation units including coal, solar, and wind
31 (ERCOT 2013). Projected peak summer demand for 2018, summer grid load is generally higher
32 than winter due to increased cooling demand, is project at 74,149 megawatts (MW) while
33 operational generation capacity over the same time period is projected at 78,543 leaving a 4,394
34 MW surplus (ERCOT, 2017).

1 **Natural Gas**

2 Natural gas is supplied to the Dallas-Fort Worth by Dallas-based energy utility Atmos
3 Energy. Demand for natural gas at the WCF is heavily driven by the Regenerative Thermal
4 Oxidizer, a component of the facility's waste processing process. Atmos has estimated that their
5 peak, single day availability of natural gas across its entire, multi-state system is approximately 4.4
6 billion cubic feet of gas. As reported in Atmos' most recent annual report, the peak, single day
7 demand for fiscal year 2016 was on January 10, 2016, which approached approximately 2.5 billion
8 cubic feet (Atmos, 2017).

9 **3.8.2 Criteria of Significance**

10 An alternative would have a potentially significant impact on utilities and infrastructure if
11 it would:

- 12 ➤ Directly result in substantial shifts in the amount of services provided, or substantial
13 changes to the utility systems infrastructure

14 **3.8.3 Impacts**

15 **No Action Alternative**

16 Under the No Action Alternative, implementation of expansion to the WCF would not take
17 place. There would be no change to utility or infrastructure or the demand on existing utilities and
18 infrastructure. Therefore, there would be no impact to utilities and infrastructure.

19 **Proposed Action**

20 Under the Proposed Action, utility infrastructure onsite including electrical supply would
21 be upgraded to account for expanded printing and administrative capacities to meet future
22 requirements. As stated above, regional utility providers are operating with surplus supply that
23 would accommodate any increased demand related to the expansion of the WCF. Specifically, the
24 local electrical grid is operating with a surplus of over 4,000 MW during peak demand periods and
25 the natural gas utility is operating with a peak demand period surplus of over 1 billion cubic feet of
26 gas. The proposed expansion of the WCF would neither create additional system demand that
27 would deplete these ongoing surplus conditions nor create such demand that new sources are
28 required to be developed to support the facility. Therefore, regional utility providers, electricity
29 and natural gas, have sufficient capacity to accommodate increased demands; and, no significant
30 impact to onsite or local utilities services would result from implementation of the Proposed Action.

31 **3.8.4 Mitigation**

32 No mitigation is necessary.

3.9 NON-HAZARDOUS WASTE AND HAZARDOUS MATERIALS AND WASTES

Solid wastes include municipal solid waste or garbage (e.g., milk cartons and coffee grounds); refuse (e.g., metal scrap, wall board, and empty containers); sludges from water treatment plants, water supply treatment plants, or pollution control facilities (e.g., scrubber slags); industrial wastes (e.g., manufacturing process wastewaters and non-wastewater sludges and solids); and other discarded materials including solid, semisolid, liquid, or contained gaseous materials resulting from industrial, commercial, mining, agricultural, and community activities. Solid wastes generated at the WCF are further classified into non-hazardous and hazardous wastes as discussed below.

Non-hazardous waste materials are defined as substances that do not have strong physical properties of ignitability, corrosivity, reactivity, or toxicity. They include wastes that do not pose a substantial present or potential hazard to human health or to the environment.

Hazardous materials are defined as substances with strong chemical and/or physical properties of ignitability, corrosivity, reactivity, or toxicity which may pose a substantial threat to human health or the environment. They include solids, liquids, contained gaseous or semi-solid waste, or any combination of wastes.

Issues associated with hazardous materials and wastes typically center around underground storage tanks (USTs); ASTs; fuel; petroleum, oil, and lubricants (POL); and processing materials. When such resources are improperly used, they can threaten the health and well-being of wildlife species, botanical habitats, soil systems, water resources, and people.

3.9.1 Setting

Non-hazardous Waste

The major production-related source of BEP's non-hazardous waste is derived from Intaglio press waste inks. Waste ink from the pre-wipe blade on face presses is reconstituted and reused; however, ink from the back presses and ink wiped off the presses and rollers during cleaning is treated as a waste. Rags used to clean the presses are laundered and reused.

Waste ink that is washed off the Intaglio plates by the wiping solution is conveyed to a pretreatment plant. During plate and roller cleaning, the ink is mixed with water and wiping solution and is suspended in aqueous solution. The purpose of the pretreatment plant is to control pH, remove metal solid, oil and grease, and to remove suspended solids, such as the ink, prior to discharge to the public sanitary sewer. The pretreatment plant ensures that the rinse water discharged to the sanitary sewer is within City of Fort Worth's thresholds, which prevents BEP from having to store all rinse water for off-site disposal. Once the solids have been precipitated out of solution, they are dewatered via centrifuge and placed in recycled 55-gallon ink drums for

1 disposal. A private contractor transports sludge from the WCF to an EPA-permitted landfill in
2 Oklahoma.

3 The most notable waste stream is related to spoils that are generated during production.
4 Spoils constitute both waste sheets that are defective or otherwise compromised and trimmings
5 generated from cutting the currency sheets. Spoils generated at WCF are shredded and shipped
6 off-site for disposal or use as an alternative fuel. The BEP's 2016 Industrial and Hazardous Waste
7 Solid Waste Registration with the Texas Commission on Environmental Quality (TCEQ) details
8 the material type, amount, and disposal method of waste that has not been designated by the EPA
9 as hazardous (Table 3-8).

10 **Table 3-8 2016 WCF Non-Hazardous Waste Production**

Material Description	Quantity Generated (lbs)	Disposal Method
Debris – rags, absorbents, spill pigs, sponges, pads from spill cleanup. Non-hazardous.	12,520	Landfill or surface impoundment
Used ethylene glycol-based antifreeze from utilities-related equipment and used propylene glycol-based antifreeze from process equipment.	1,800	Landfill or surface impoundment
Waste ink with plastic, paper, rages, sample cans and drum liners from printing presses. Non-hazardous.	123,000	Landfill or surface impoundment
Organotin compound (“ThermChek® 837”), chemical name is Dibutyltin Carboxylate. Yellow Liquid.	1,080	Landfill or surface impoundment (360 lbs) and off-site treatment (720 lbs)
Unused or Expired Ink Mill or Roller Recovery Ingredients	1,440	Landfill or surface impoundment
Liquid waste with some solids that is generated when I10 printing presses are cleaned out, may contain caustic soln, propylene or ethylene glycol, inks, and oil but does not designate as RCRA waste	2,880	Incineration (1,080 lbs) and Landfill or surface impoundment (1,800 lbs)
Treatment plant solids	2,265,600	Unknown
Unnamed non-hazardous materials	360	Unknown
Paint-related Universal Waste	360	Unknown
Pit Waste	6,840	Unknown
Petroleum Oils	5,760	Unknown

11 lbs = pounds

(TCEQ, 2017b; Tran, 2017)

12 Hazardous Materials and Waste

13 Hazardous materials are used onsite at the WCF both in the printing process and other
14 associated activities including diesel fuel, castor oil, lubricating oils, and printing electroplating
15 fluids. The WCF currently utilizes two, 10,000-gallon, diesel USTs that provide fuel storage in
16 support of WCF operations.

The manufacturing of printing plates requires several steps and is the source of several of the BEP's hazardous waste streams. Impressions, referred to as Alto plates, taken from the master plates are cleaned and coated with dichromatic prior to placement in a nickel sulfonate bath. This bath creates a nickel-printing surface on the plate. After a nickel layer of the correct thickness has been deposited on the surface of the plate, the plates are cleaned, polished, and trimmed to the correct size. The plates are then plated in a chromic acid bath, which creates a hardened wearing surface of chrome on the plate. Once removed from the chromic acid, the plates are inspected. Plates that fail to meet specifications are placed in a dechroming tank. Once the imperfect plates are dechromed, they are again plated in the chromic acid bath. After a plate has passed inspection, it is cleaned with a 50 percent solution of hydrochloric acid and then ready for use.

The BEP's 2016 Industrial and Hazardous Waste Solid Waste Registration with the TCEQ details the material, amounts, and disposal method for EPA-designated hazardous waste generated by the WCF during 2016 (Table 3-9).

Table 3-9 2016 WCF Hazardous Waste Production

Material Description	Quantity Generated (lbs)	Disposal Method
Waste solvent from cleaning printing presses or other equipment, spill collection, and unused or expired shelf life non-halogenated solvents. Ignitable waste.	7,200	Off-site treatment (2,520 lbs) and landfill or surface impoundment (4,680 lbs)
Waste from treatment of wastewater from nickel and chrome plating operation; 1991. Chromium, lead, and electroplating wastewater treatment sludge.	22,500	Off-site treatment (985 lbs) and landfill or surface impoundment (1,250 lbs)
Depleted chromium acid bath from chromium plating of currency plates. Corrosive, chromium, and lead waste.	3,540	Landfill or surface impoundment
Waste liquids from printing press chrome cylinder repair process, involving electroplating. Chromium and corrosive waste.	125	Off-site treatment
Residual solvents, inks, oils collected from punctured aerosol cans and solvent wastes from quality testing of currency in a lab. Ignitable waste.	360	Incineration
Caustic filters from wiping solution system in Intaglio plate printing with free liquids	820	Off-site treatment (360 lbs) and Landfill or surface impoundment (460 lbs)
Waste Oil	360	Unknown

lbs = pounds

(TCEQ, 2017b; Tran, 2017)

Hazardous waste quantities vary year-to-year depending on actions taken during a given year. For instance, during 2016, wastewater from electroplating made up the greatest share of

1 hazardous waste due to a clean-out operation of this system; whereas, during most years, waste
2 solvent is the greatest contributor to hazardous waste generation

3 **3.9.2 Criteria of Significance**

4 The Proposed Action or an alternative would have a significant impact on solid waste,
5 hazardous materials and wastes if it would cause any of the following consequences:

- 6 ➤ Create significant hazard through the use, handling, transport, or disposal of
7 hazardous materials or wastes.
- 8 ➤ Create reasonably foreseeable conditions that would have the potential for improper
9 release of hazardous materials.
- 10 ➤ Subject humans to soils with concentrations of hazardous materials in excess of
11 health advisory limits.
- 12 ➤ Increase waste generation rates beyond a facility's handling capacity.

13 **3.9.3 Impacts**

14 **No Action Alternative**

15 Under the No Action Alternative, the implementation of expansion of the WCF would not
16 take place. Existing conditions would remain unchanged, and there would be no additional
17 hazardous materials used and no additional solid or hazardous wastes generated in the area. As a
18 result, there would be no impacts to hazardous materials and wastes.

19 **Proposed Action**

20 Under the Proposed Action, the existing USTs would be replaced with ASTs as part of the
21 development of a new, consolidated hazardous materials handling facility which is considered a
22 beneficial impact for improved safety and ease of storage of hazardous materials at the WCF.

23 The proposed expansion areas would support additional, or updated printing presses which
24 in turn would potentially increase the total waste output, hazardous and non-hazardous, of the
25 facility. However, historical waste output levels described in the previous 2004 EA were higher
26 than 2016 levels. As a most conservative estimate with the assumption that all outputs scale as a
27 straight line, it would require a 50 percent increase in printing presses to equal 2004 waste output
28 levels. Furthermore, treatment facilities and landfills that receive waste from the WCF have not
29 demonstrated an inability to take in and process waste (non-hazardous and hazardous) over time.
30 Therefore, the Proposed Action would not result in a significant increase in waste generation
31 beyond the capacity processors and landfills that would result in a significant impact related to
32 waste generation.

3.9.4 Mitigation

No mitigation is necessary.

3.10 CUMULATIVE IMPACTS

3.10.1 Cumulative Impacts

Cumulative impacts on environmental resources result from incremental impacts of an action when combined with other past, present, and reasonably foreseeable future actions in an affected area. Cumulative impacts can result from minor, but collectively substantial, actions undertaken over a period of time by various Federal, state, or local agencies or persons. In accordance with NEPA, a discussion of cumulative impacts resulting from projects proposed, under construction, recently completed, or anticipated to be implemented in the near future is required.

Fort Worth is one of the fastest growing municipalities in the United States, with the Census Department estimating an approximate growth of 14.7 percent from 741,206 in 2010 to 854,113 in 2016. Rapid growth has greatly expanded the demand for housing in the Dallas-Fort Worth area including in the vicinity of the WCF. This is exemplified by the number of residential housing developments that have been either recently constructed or are in process in the vicinity of the WCF including an expanding, as of December 2017, housing development immediately to the east of the facility and across Blue Mound Road to the west of the facility. A review of aerial photos of the area dated September 5, 2017 found that over 300 single-family homes have been constructed, or are under construction, within a mile of the WCF.

Although the exact timing of the construction projects described above are not yet known, the potential exists for cumulative environmental impacts to occur with regard to air quality and transportation and circulation. Cumulative air quality impacts are expected to be negligible since all individual projects would be required to implement best management practices (BMPs) to reduce air pollutant emissions below significance thresholds. With regard to regional traffic and circulation, if any of the cumulative construction projects occur concurrently with the Proposed Action, short-term impacts to traffic caused by additional construction equipment and construction workers traveling along surrounding roadways could potentially cause a short-term adverse cumulative impact during peak traffic hours; however, construction activities would be temporary and sporadic. Over the long-term, TxDOT's planned road widening and improvement project for Blue Mound Road in the vicinity of the WCF would offset traffic impacts of the expanded facility and is projected to more than accommodate increases in vehicular traffic associated with the expansion of residential housing developments along the same stretch of Blue Mound Road. Therefore, cumulative impacts to transportation and circulation related to construction are expected to be beneficial.

1 **3.11 SUMMARY AND CONCLUSION**

2 The Proposed Action would involve the expansion of the physical structure of the WCF
3 and the production capability of the facility itself. No significant adverse impacts are expected to
4 occur from implementation of the Proposed Action in either in the short-term, long-term, or
5 cumulatively. Because the Proposed Action would not result in significant adverse environmental
6 impacts, it is the conclusion of this EA that the preparation of a Finding of No Significant Impact
7 (FONSI) is appropriate. A FONSI will be published in the *Federal Register*, and interested parties
8 will be given a 30-day period to review the EA and provide comments on the Proposed Action.

4.0 References, Consultations, and Sources

4.1 INDIVIDUALS INTERVIEWED

Marc Dijamco, WCF Facilities Division Manager

Davin Greenly, WCF Environmental Representative

Nathan Hizer, WCF Facilities Support Branch Manager

Charles McGregor, USACE Fort Worth

Timothy Tran, USACE Fort Worth Project Manager

Megan Williams, WCF Expansion Project Manager

4.2 PERSONAL COMMUNICATIONS

Timothy Tran, USACE Fort Worth Project Manager. December 13, 2017

4.3 DOCUMENTS AND DATA SOURCES

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5.0 List of Preparers

This EA was prepared on behalf of the BEP and in support of the WCF via a Task Order issued by the USACE, Forth Worth District. Members of the consultant team comprised professionals from Clover Leaf Solutions, Inc. (Clover Leaf) and Amec Foster Wheeler Environment & Infrastructure, Inc. (Amec Foster Wheeler). A list of project personnel is provided below.

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