Appendix A

REEVALUATION - CDOT FORM 1399

List of Abbreviations

APE Area of Potential Effect
BMP best management practice
CCD City and County of Denver

CDOT Colorado Department of Transportation

CDPHE Colorado Department of Public Health and Environment

CDPS Colorado Discharge Permit System
CFR Code of Federal Regulations
CLMR Conditional Letter of Map Revision

CO Carbon Monoxide CWA Clean Water Act

DEIS Draft Environmental Impact Statement

EB Eastbound

EDB Extended Detention Basins

EDR environmental data resources

EIS Environmental Impact Statement

EPA Environmental Protection Agency

FEIS Final Environmental Impact Statement

FEMA Federal Emergency Management Agency

FHWA Federal Highway Administration

HASP Health and Safety Plan

I-25 Interstate 25

MESA Modified Environmental Site Assessment

MMP Materials Management Plan MOA Memorandum of Agreement

MS4 municipal separate storm sewer system

MSAT mobile source air toxics

NAAQS National Ambient Air Quality Standard

NAC Noise Abatement Criteria

NB Northbound

NEPA National Environmental Policy Act

NPS National Park Service

OSHA U.S. Department of Labor Occupational Safety and Health Administration

PA Programmatic Agreement

PM₁₀ particulate matter less than 10 microns in size

PS&E Plans, Specifications, and Estimates
RCRA Resource Conservation and Recovery Act

ROD Record of Decision ROD2 Record of Decision 2

ROW Right-of-Way SB 40 Senate Bill 40 SF square feet

TNM Traffic Noise Model

US 6 6th Avenue, or United States Highway 6

USACE US Army Corps of Engineers
USFWS US Fish and Wildlife Service

WB Westbound

COLORADO DEPARTMENT OF	Original NEPA	Reevaluation Date:	Project Code:
TRANSPORTATION	Approval Date:		-
REEVALUATION FORM	July 2007	December 2012	BR 0061-083

Project Name and Location: US 6 Bridges Design Build Project

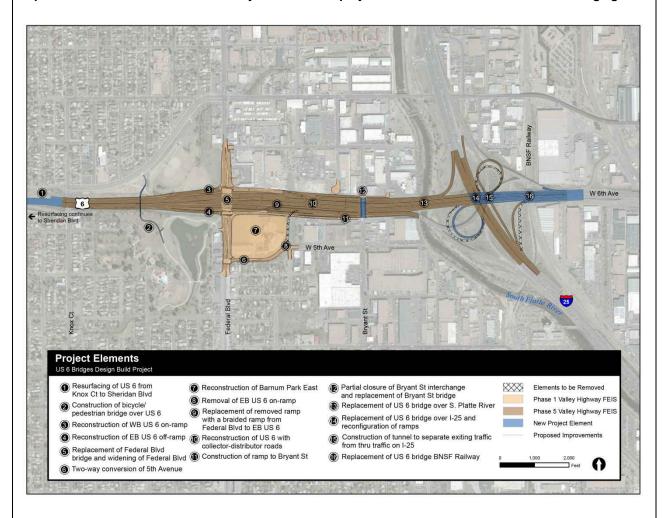
NEPA Document Title: I-25 Valley Highway Logan to US 6 Final Environmental Impact Statement (2006) and Record of Decision (2007)

Region/Program/Residency: CDOT Region 6

Project Description:

The US 6 Bridges Design Build Project (herein referred to as the Project) is the next construction phase of the I-25 Valley Highway Logan to US 6 Final Environmental Impact Statement (FEIS) Preferred Alternative to be implemented. The Project includes modifications to the roadway, interchanges, and bridges along 6th Avenue (US 6) between Sheridan Boulevard and the BNSF Railway in Denver, Colorado.

The major elements of the Project include the replacement of five bridges, ramp improvements, reconstruction of US 6 from Federal Boulevard to the BNSF Railway bridge structure, widening of Federal Boulevard from 5th to 7th Avenues, and a bicycle/pedestrian bridge over US 6 as mitigation for Section 4(f) impacts. All of these elements and many of the smaller project elements are included in the following figure.



Project Phasing Plan and Portions Completed (if warranted):

As described in the FEIS, FHWA and CDOT intend to work toward implementation of the Preferred Alternative in its entirety. Due to funding limitations and the requirements for fiscal constraint, only Phases 1 and 2 were selected for implementation in the 2007 ROD.

Several elements of Phase 1 are already under construction and expected to be completed in 2013. These include:

- Reconstruction of the I-25 / Santa Fe Drive interchange
- Replacement of the southbound Santa Fe Drive bridge over the South Platte River
- Reconfiguration of Santa Fe Drive and Kalamath Street between I-25 and Alameda Avenue, along with associated access roads in this area
- Replacement of the Alameda Avenue bridge over I-25
- . Reconstruction of I-25 mainline from Broadway viaduct to north of Alameda Avenue
- Minor additional improvements to nearby roadways

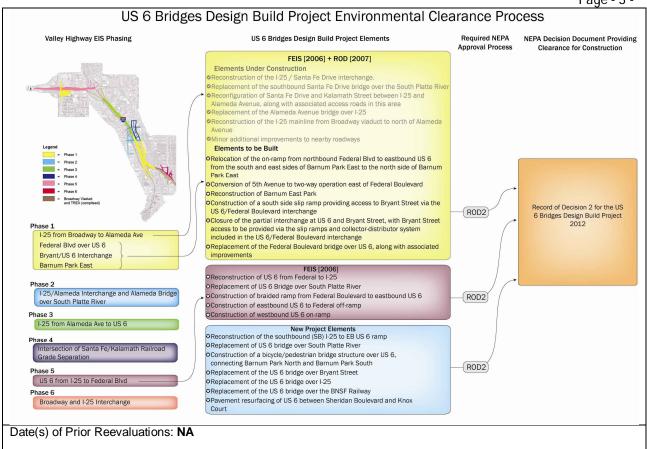
This form summarizes an environmental reevaluation and supports a new Record of Decision (ROD2) for additional improvements in the Project area. These elements are described in detail in the *Portion of Project Currently Being Advanced* section below.

As stated in the 2007 ROD, subsequent project phases will be selected and implemented as additional funding becomes available, enabling FHWA and CDOT to work toward implementation of the entire Preferred Alternative. For each subsequent phase, a new NEPA decision document will be issued. FHWA and CDOT will review the information provided in the FEIS and in previous decision documents in preparing each subsequent decision document.

Portion of Project Currently Being Advanced:

The Project includes the following elements which are also identified in the *US 6 Design Build Project Phasing* graphic following this description:

- 1. Pavement resurfacing of US 6 from Knox Court to Sheridan Boulevard (New Project Element)
- 2. A bicycle/pedestrian bridge over US 6, connecting Barnum Park North and Barnum Park (also known as Barnum Park South, and herein referred to as Barnum Park South), which is included to mitigate Section 4(f) impacts (New Project Element)
- 3. Reconstruction of the Federal Boulevard to westbound (WB) US 6 on-ramp as part of a diamond interchange (*Phase 5*)
- 4. Reconstruction of the eastbound (EB) US 6 to Federal Boulevard off-ramp (Phase 5)
- 5. Replacement of the functionally obsolete Federal Boulevard Bridge over US 6 and widening of Federal Boulevard, from five to six lanes, from 5th to 7th Avenues (*Phase 1*)
- 6. Conversion of 5th Avenue to two-way traffic from Federal Boulevard to Decatur Street (Phase 1)
- 7. Reconstruction of Barnum Park East to include in-kind replacement of impacted facilities, which is included to mitigate Section 4(f) impacts (*Phase 1*)
- 8. Removal of the Federal Boulevard/5th Avenue ramp to EB US 6 (*Phase 1*)
- 9. Replacement of removed ramp with a braided ramp from Federal Boulevard to EB US 6 (Phase 5)
- 10. Reconstruction of US 6 with collector-distributor roads/auxiliary lanes from Federal Boulevard to the BNSF Railway bridge structure (*Phase 5*)
- 11. Construction of ramp from EB US 6 to Bryant Street (Phase 1)
- 12. Closure of the WB US 6 to Bryant Street ramp (*Phase 1*) and replacement of the structurally deficient Bryant Street Bridge over US 6 (*New Project Element*)
- 13. Replacement of the structurally deficient US 6 bridge over the South Platte River (Phase 5)
- 14. Replacement of the functionally obsolete US 6 bridge over I-25 (New Project Element) and reconfiguration of ramps (Phase 5)
- 15. Construction of a tunnel along the east side of I-25, under US 6, to separate traffic on northbound (NB) I-25 from traffic exiting the interstate to travel west on US 6 (*Phase 5*)
- 16. Replacement of the structurally deficient US 6 bridge over the BNSF Railway (New Project Element)



I. Document Type

- Categorical Exclusion (CE)
- Environmental Assessment (EA)
- ☐ Finding of No Significant Impacts (FONSI)
- ☐ Draft Environmental Impact Statement (DEIS)
- Final Environmental Impact Statement (FEIS)
- Supplemental Environmental Impact Statement (SEIS)
- Record of Decision (ROD)
- Other (such as: local funding, etc.) ___

II.	Reason for Reevaluation	
	Project is proceeding to the next major approval or action [23 CFR 771.129(describe) Project changes such as laws, policies, guidelines, design, environmental semitigation (describe) Project changes are described in Section IV below Greater than three years have elapsed since FHWA's approval of the DEIS [FHWA's last major approval action for the FEIS [23 CFR 771.129(b)]	tting, impacts or
Ш.	Other: Conclusion and Recommendation	
	The above environmental document has been reevaluated as required by 23 was determined that no substantial changes have occurred in the social, eco impacts of the proposed action that would substantially impact the quality of economic, or natural environment. Therefore, the original environmental doc designation remains valid for the proposed action. It is recommended that the in be advanced to the next phase of project development. A summary of the in Section IV.	nomic, or environmenta the human, socio- tument or CE e project identified here
	The above environmental document has been reevaluated as required by 23 was determined that the environmental document or CE designation is no lor information is required. Additional required documentation is identified in Sec	nger valid or more
	Approval of this Form 1399 shall be confirmed by the FHWA signature of Decision 2 for the US 6 Bridges Design Build Project	on the <i>Record of</i>
	Regional Planning Environmental Manager or Designee	Date
	Federal Highway Administration Division Administrator or Designee	 Date

IV. Evaluation

Level 1: Less than three years since last major step to advance the action (e.g. approval of NEPA document, authority to undertake final design, authority to acquire significant portion of ROW, approval of PS&E) and there are no changes in project scope, environmental conditions, environmental impacts or regulations and guidelines OR - The document being re-evaluated is a programmatic Categorical Exclusion regardless of time since the last major step to advance the action (as long as the project would still be covered by a programmatic Categorical Exclusion). All decisions in the prior NEPA document remain valid. No FHWA concurrence is required. Note to file and to distribution below.
Level 2: Less than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
Level 3: More than three years since last major step to advance action and there are only minor changes in the project scope and/or updates or explanation needed for one or more resource areas. FHWA concurrence is required.
Level 4: Major changes in project scope or environmental commitments, or for EISs when greater than three years have elapsed since the last major project action. Updates or new studies maybe required. A Level 4 Reevaluation may require a separate document. FHWA concurrence is required.

ENVIRONMENT SETTING, AFFECTED ENVIRONMENT, AND ENVIRONMENTAL IMPACT ASSESSMENT:

Document changes to human, socio economic, or natural environment for environmental setting or circumstances. Document changes in impact status. Place check-mark or description where relevant. Note: this list may be expanded or adjusted to match the headings in the original environmental document reviewed.

	Chan Affect Enviro or Se	cted nment	Chan Environ Imp	mental	Date	Highlight Section VI Additional Studies Required or Section
Setting/Resource/Circumstance	Yes	No	Yes	No	Reviewed	IX Attachments
Air Quality					Oct 2012	Air Quality Technical Report
Geologic Resources and Soils		\boxtimes		\boxtimes		
Water Quality	\boxtimes		\boxtimes		Oct 2012	Water Quality Plan
Floodplains	\boxtimes		\boxtimes		Oct 2012	Water Quality Plan
Wetlands/Waters of U.S.					Oct 2012	Biological Resources Report
Vegetation and Noxious Weeds					Oct 2012	Biological Resources Report
Fish and Wildlife					Oct 2012	Biological Resources Report
Threatened/Endangered Species	\boxtimes				Oct 2012	Biological Resources Report
Historic Resource (includes bridges)					Oct 2012	Cultural Resources Technical Report/Memorandum
Archaeological Resources					Oct 2012	Archaeology and Paleontology Technical Report
Paleontological Resources					Oct 2012	Archaeology and Paleontology Technical Report
Land Use		\boxtimes		\boxtimes	Oct 2012	See "Other"
Social Resources		\boxtimes		\boxtimes	Oct 2012	See "Other"
Economic Resources		\boxtimes		\boxtimes	Oct 2012	See "Other"

Environmental Justice				\square	Oct 2012	See "Other"
Residential/Business Right-of-Way Impacts					Oct 2012	Reevaluation, Section 5.1
Transportation Resources (roadway, rail, bus, bike, pedestrian, etc.)	\boxtimes		\boxtimes		Oct 2012	Transportation Technical Report
Utilities and Railroads		\boxtimes		\boxtimes	Oct 2012	
Section 4(f)/6(f)	\boxtimes		\boxtimes		Oct 2012	Section 4(f) and 6(f) Technical Report
Farmlands		\boxtimes		\boxtimes	Oct 2012	See "Other"
Noise	\boxtimes		\boxtimes		Oct 2012	Noise and Vibration Technical Report
Visual Resources/Aesthetics					Oct 2012	Aesthetics and Urban Design Technical Report
Energy		\boxtimes		\boxtimes	Oct 2012	See "Other"
Hazardous Materials	\boxtimes				Oct 2012	Hazardous Material Technical Report
Cumulative Impacts		\boxtimes		\boxtimes	Oct 2012	See "Other"
Other(s)					Oct 2012	Technical Memorandum Summarizing Changes From FEIS and Impacts for Land Use, Social and Economic Resources, Environmental Justice, Farmlands, Energy, and Cumulative Effects

DESIGN ALTERATIONS:

Document changes to project scope and or design criteria:

The 2006 FEIS scope and design addressed a much larger area including US 6 from the US 6 and Federal Boulevard interchange to I-25 and I-25 south to Broadway. The Project, described in detail above in Portion of Project Currently Being Advanced adds scope for roadway improvements east and west of the original US 6 project area limits, provides for additional structural replacements and changes to the ramps and adjacent property impacts. If there are resource-specific scope and design criteria alterations, other than the changed study area, they are listed below.

Air Quality

The air quality analysis was conducted to estimate the changes of emission levels under the 2035 No Build (without the Project) and 2035 Build (with the Project) scenarios and to assess whether impacts of these changes could cause or exacerbate a violation of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO). In addition, as requested by CDOT, the following additional analyses were conducted: a qualitative analysis of particulate matter smaller than 10 microns in diameter (PM₁₀) and a mobile source air toxics (MSAT) analysis. This project meets air quality conformity requirements.

Water Quality

Two new water quality ponds are required for the Project: the 6th Avenue Interchange Water Quality Pond (which was identified in the FEIS) and the US 6 Water Quality Pond. Section 4 of the ROD2 outlines what mitigation is required for water quality impacts.

Floodplains

The reconstruction of the I-25/US 6 interchange and associated regrading is a modified project element. Impacts to the floodplain elevation are not anticipated. Section 4 of the ROD2 outlines requirements for potential floodplain impacts.

Historic Resources

A new Area of Potential Effect (APE) was developed in coordination with the State Historic Preservation Office (SHPO) and revised as the project limits were further defined. The Project would adversely affect one resource determined to be eligible for listing in the National Register of Historic Places. A portion of historically significant brick-lined sewer would be impacted by modifications to the bridge that carries US 6 over the South Platte River. A 240-foot segment of

the sewer would be removed and replaced by concrete piping. The West and Southside Interceptor Sewer was not identified in the FEIS/2007 ROD

Residential/Business Right-of-Way Impacts

Existing right-of-way (ROW) information for the Project was collected from CDOT and the City and County of Denver assessor's records. Existing publicly owned ROW along the Proposed Project Area varies from 300 feet in width (along US 6) to 500 feet in width (at major interchanges). As part of the US 6 Bridges Design Build Project one business (Parcel No. 200) will be displaced. In addition, there will be sixteen permanent easements or partial acquisitions and eight temporary easements.

Transportation Resources

This transportation analysis of the Project includes traffic projections to 2035, traffic operations updates to the FEIS, an assessment of bicycle and pedestrian impacts, and an assessment of safety impacts.

Utilities and Railroads

Since the FEIS, the US 6 Bridges Design Build project is replacing the US 6 bridge over the BNSF Railway.

Section 4(f)/6(f)

The Project has Section 4(f) impacts that are different from the FEIS Preferred Alternative because of design refinements made since the FEIS and 2007 ROD. Two parks (Barnum Park North and Barnum Park East) and one historic resource (West and Southside Interceptor Sewer, which is described in Section 4.5) are subject to a Section 4(f) use with implementation of the Project.

The FEIS documented no Section 6(f) conversions under the Preferred Alternative. The current Project has 6(f) impacts that are different from the FEIS Preferred Alternative because of design refinements made since the FEIS and 2007 ROD. One park (Barnum Park North) is subject to a Section 6(f) conversion with implementation of the Project. One recreation area (the South Platte River Floodplain, which includes the South Platte River Trail) is subject to a temporary impact during construction activities.

Noise

The noise levels along the current roadways were measured using 2035 traffic projections at 19 locations, and existing and future No Build Alternative and Project peak noise levels were modeled for 31 locations using FHWA's Traffic Noise Model (TNM®).

Visual Resources and Aesthetics

The Aesthetics Addendum from October 2006 contains the "Kit of Parts" and urban design guidelines for the Phase 1 and Phase 2 portions of the Valley Highway FEIS and ROD. The Project will apply recommendation from the 2012 Aesthetics Technical Report, Appendix D, during final design and construction.

Hazardous Materials

Updated Right-of-Way plans and a new Environmental First Search Summary Report was used to determine properties with proposed or recognized environmental conditions.

REGULATORY CHANGES:

Document changes to laws, regulations, and/or guidelines:

Air Quality

- 2007: US Environmental Protection Agency (EPA) rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007)
- 2008: EPA designated the Denver/North Front Range region as nonattainment for the 8-hour ozone standard
- 2008: EPA modified NAAQS for PM10
- 2009: New PM2.5/10 Guidance from FHWA/EPA
 2010: New EPA regulation from May 2004 called "Clean Air Nonroad Diesel Rule" calling for the use of ultra-low sulfur diesel for most non-road diesel equipment, including construction equipment, beginning in 2010

Water Quality

The CDOT Municipal Separate Storm Sewer Systems (MS4) permit and New Development and Redevelopment (NDRD) Stormwater Management Program require that BMPs be provided for significant highway redevelopment construction that will disturb more than 1 acre.

Threatened and Endangered Species

Since the 2006 FEIS and 2007 ROD, a USFWS Block Clearance Zone (2008) was established for Ute ladies tresses orchid, Preble's meadow jumping mouse and the Colorado butterfly plant. The Project Area falls completely within this Block Clearance Zone; therefore, no additional coordination was required. No suitable habitat for any federally listed threatened or endangered species occurs within the Project Area.

Historic Resources

There have been no systemic regulatory changes to the Section 106 process between the FEIS, 2007 ROD, and this 2012 revaluation. New historical resources were identified due to the maturation of their age to over 50 years between 2007 and 2012.

Section 4(f)/Section 6(f)

- Nationwide Programmatic Evaluation for net benefit to 4(f) resources approved
- De minimis finding available. When the resource owner or the agency with jurisdiction agree that the proposed project will result in minimal impacts to the resource, a de minimis finding can be issued, allowing projects to move forward without additional Section 4(f) evaluation.
- The regulations have been updated so that when evaluating the various avoidance alternatives that are part of full Section 4(f) analysis, other resources beyond Section 4(f) resources can be considered as part of the decisions.

Noise

The CDOT Noise Manual was revised to comply with the June 2010 update to 23 CFR 772 (CDOT 2011). CDOT implements FHWA noise regulations in accordance with Analysis and Abatement Guidelines (CDOT 2011) which have been updated since the 2006 FEIS. According to the updated manual, a noise impact occurs when the future noise level for one or more build alternative results in a substantial increase in the noise level (defined as a 10 dBA or more increase over the existing noise levels) or when the future noise level for one or more Build Alternative reaches or exceeds the Noise Abatement Criteria (NAC).

IMPACTS ASSESSMENT:

For items checked as changed above: assess the affected natural and socio-economic environment, impacts and new issues/concerns which may now exist.

Air Quality

Following guidance set forth in 40 CFR 93.123(b)(1)(i), the Colorado Department of Public Health and Environment, Air Pollution Control Division, EPA and FHWA determined on August 22, 2012 that the Project is not considered a project of air quality concern regarding PM₁₀ emissions. In addition, the project has demonstrated local and regional air quality conformity requirements. CDOT and FHWA have concluded that construction of the Project will not create long-term regional or local air quality impacts, and the Project has demonstrated local and regional air quality conformity.

Construction

Excavation, grading, and fill activities could increase local fugitive dust emissions. Fugitive dust is airborne particulate matter, generally of a relatively large particle size (greater than 100 microns in diameter). Because of the large size, these particles typically settle within 30 feet of their source. Smaller particles could travel as much as several hundred feet depending on wind speed. Through the use of mitigation measures, fugitive dust emissions will be effectively controlled.

Water Quality

In addition to the BMPs required for the MS4 permit and NDRD program, the Master Water Quality Report (Appendix M) identified the need for additional water quality measures which could be provided by two new water quality ponds; in addition to the Decatur water quality ponds used to mitigate the additional area, imperviousness, and/or runoff in this area. The US 6 Water Quality Pond and the 6th Avenue Interchange Water Quality Pond are proposed extended detention basins (EDB) that will be used to comply with water quality standards for the Project Area. An EDB is similar to a dry detention basin; however, they maintain a permanent pool in dry weather.

Construction

During construction, stormwater runoff could present the potential for violations of water quality standards in adjacent waterways and groundwater. Without mitigation measures, stormwater runoff could cause erosion and sedimentation, and transport of spilled fuels or other hazardous materials. The majority of the Project area would drain into the South

Platte River. Groundwater could be encountered during relocation of deep utilities, excavation, and construction of tunnels and below-grade roadways. Dewatering and treatment would likely be required where groundwater is present. Mitigation measures for contaminated groundwater potentially encountered during construction are discussed in Section 4.13 Hazardous Waste.

Floodplains

Impacts to the floodplain elevation due to construction of the Project are not anticipated. Section 4 of the ROD2 outlines requirements for potential floodplain impacts.

Wetlands and Waters of the US

A new wetland was delineated north of the US 6 structures over the South Platte River. This wetland is 100 SF in size.

Vegetation and Noxious Weeds

There will be impacts to urban and riparian vegetation as a result of this project.

Fish and Wildlife

MBTA rules will still apply. The Project will still require the replacement of the structures over the South Platte River and the removal of trees throughout the project area. There is potential to disturb migratory bird nests as a result of tree removal and potential to disturb nesting Cliff Swallow during demolition or construction activities of the structures over the South Platte River.

There will be minor impacts to the northern leopard frog and the common garter snake. Impacts to habitat to the northern leopard frog and the common garter snake will be mitigated by erosion control to keep sediment out of the South Platte River during construction and 1:1 replacement of all riparian vegetation as required by Senate Bill (SB) 40. Measures will be outlined in provisions of the SB 40 Wildlife Certification and BMPs associated with the CWA 404 Permit. These species were not previously addressed in the FEIS and 2007 ROD.

Threatened and Endangered Species

The Project will result in a water depletion to the South Platte River; therefore there is a potential to impact the following federally listed threatened or endangered species: Least Tern, pallid sturgeon, Piping Plover, western prairie fringe orchid, and the Whooping Crane. Impacts to these species as a result of a water depletion to the South Platte River are addressed by the April 24, 2012 Biological Opinion issued by the USFWS addressing depletions and impacts to those species. The Project will be required to report the amount of water used from the South Platte River to USFWS.

Historic Resources

On August 23, 2012, SHPO provided a finding of concurrence with CDOT's cultural analysis findings. One historically significant resource was identified. A portion of historically significant brick-lined sewer is impacted by US 6 improvements and will be removed and replaced by concrete piping. This sewer segment composes a small portion (0.10 percent) of a seven mile stretch of historically significant functioning brick sewer. CDOT has determined and SHPO concurred that the removal of this segment can be considered an *adverse effect*. CDOT, FHWA, SHPO, CCD, and Metro Wastewater intend to develop a Memorandum of Agreement (MOA) which will provide for mitigation of this adverse effect and will apply to the entire seven mile stretch of sewer. The first steps of this PA have begun with the development of a report on the history of Denver's brick sewers. Mitigation for this resource will be handled through this separate MOA and with SHPO's concurrence.

Residential/Business Right-of-Way Impacts

The Project will require displacement of one business (Parcel No. 200); full purchase of one property (Parcel No. 200); acquisition of sixteen permanent easements or partial acquisitions and eight temporary easements.

Transportation Resources

The Project would not have any adverse impacts on traffic operations and would result in overall traffic operations improvements. These impacts are similar to those disclosed in the FEIS for the Preferred Alternative.

Construction

Construction detours would be expected to create short-term impacts on local traffic circulation and congestion. For this project, these impacts would be substantial. Delays to the traveling public and inconvenience to corridor residents would occur. A primary goal of CDOT during construction of the project would be to minimize inconvenience to the public. The construction impact best management practices are:

 The contractor shall maintain two through lanes at all times on EB and WB US6 from the South Platte River to the east project limit.

- The contractor shall maintain three through lanes at all times on EB and WB US6 from the west project limit to the South Platter River.
- All lane closures on I25 shall be consistent with the Region Six Lane Closure Strategy.

Utilities and Railroads

Construction

The Project corridor right-of-way is crossed by various utilities, some of which would be relocated during construction by CDOT's contractor or by others. Impacts to existing utilities located within the new right-of-way were evaluated based on information found in the FEIS. Utilities in the project corridor to be considered during the design-build process are electrical and cable TV, communication cables, natural gas, sanitary sewer storm sewer, water lines, and fiber optic lines.

Section 4(f)/Section 6(f)

Section 4(f)

Section 4(f) uses due to the Project as compared to the FEIS/2007 ROD:

	i roject as compared to the r E10/2001	r ROB.
Section 4(f) Resource	Use by	Use by
	2007 ROD Preferred Alternative	Project
	(acres)	(acres)
Barnum Park South	0.01	No use (temporary occupancy)
Barnum Park North	0.42	0.90
Barnum Park East	2.1	1.64
Frog Hollow Park	No use	No use
South Platte River Trail	No use (temporary occupancy)	No use (temporary occupancy)
Milstein Park	Not identified	No use
West and Southside	Not identified	240 linear feet
Interceptor Sewer		

Section 4(f) Resource	Use by	Use by
	2007 ROD Preferred Alternative	Project
	(acres)	(acres)
Barnum Park South	0.01	No use (temporary occupancy)
Barnum Park North	0.42	0.90
Barnum Park East	2.1	1.64
Frog Hollow Park	No use	No use
South Platte River Trail	No use (temporary occupancy)	No use (temporary occupancy)
Milstein Park	Not identified	No use
West and Southside	Not identified	240 linear feet
Interceptor Sewer		

Barnum Park North Impacts

In Barnum Park North, the FEIS identified small uses of parkland on the east side of the park (0.02-acre) associated with a redesigned WB on-ramp to US 6 from Federal Boulevard and on the south side of the park (0.03-acre) for the US 6 ramp. The 2007 ROD confirmed the use on the east side of the park, but the use on the south side increased to 0.4-acre. The Project will convert 0.90-acres of Barnum Park North to transportation use as a result of a reconstructed WB Federal Boulevard to US 6 ramp and Federal Boulevard right-of-way (ROW) widening. The 0.90-acre use includes a 0.27-acre maintenance easement associated with a retaining wall along the reconstructed ramp, and a 0.63-acre area from the WB US 6 on-ramp reconstruction.

Barnum Park East Impacts

The 2007 ROD documented a 2.1-acre conversion of Barnum Park East to transportation use (this updated what was documented in the FEIS). This would occur on the northern and western park edges due to the widening of Federal Boulevard and the new EB on-ramp from Federal Boulevard to US 6. The Project has less impact (1.64-acres) because the footprint of the US 6/Federal Boulevard interchange has been compressed.

West and Southside Interceptor Sewer Impacts

Replacement of the US 6 bridge over the South Platte River will require removal of a segment of the West and Southside Interceptor Sewer, located west of the river. The West and Southside Interceptor Sewer is a Section 4(f)

resource because it is a historic resource for which the State Historic Preservation Officer (SHPO) found an adverse effect which is discussed in more detail in Appendix I of the ROD2. The sewer was not identified as a historic or Section 4(f) resource in the FEIS or 2007 ROD. A 240-foot portion of the seven-mile-long brick-lined sewer segment needs to be removed because it could sustain damage during construction due to pile driving and drilling. Preservation in place is not prudent due to potential damage. The sewer will be replaced with a new concrete pipe. For the West and Southside Interceptor, the SHPO determined that the Project met the criteria in order to use the Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) Property, and that there are no feasible and prudent alternatives to the relocation and reconstruction of the sanitary sewer. The letters between CDOT and SHPO regarding this determination can be found in Appendix B of the ROD2.

Section 4(f) Finding

At the time of the FEIS, FHWA found that there were no prudent and feasible alternatives that met the purpose and need of the project and avoided the use of Barnum Park North and Barnum Park East. Because the impacts of the Project are within the same general footprint and of the same general scale as the FEIS Preferred Alternative and 2007 ROD Selected Alternative, these findings are still valid.

For the West and Southside Interceptor Sewer, the SHPO determined that the Project met the criteria in order to use the Section 4(f) Evaluation and Approval for Transportation Projects That Have a Net Benefit to a Section 4(f) Property and that there are no feasible and prudent alternatives to the relocation and reconstruction of the sanitary sewer. FHWA also finds that there are no prudent and feasible alternatives to the use of the West and Southside Interceptor Sewer, and the Project includes all possible planning to minimize harm resulting from such use.

Section 6(f)

Construction of the new WB on-ramp at Federal Boulevard will result in a 0.63-acre encroachment into Barnum Park North, and constitutes a Section 6(f) resource conversion to a transportation facility. This conversion would cover the same area that is being documented as a Section 4(f) use, less the maintenance easement. This conversion will impact the existing bicycle/pedestrian trail, currently located in CDOT ROW.

The South Platte River Trail, which extends 19 miles north and south of US 6 in the South Platte River floodplain, offers both commuter and recreational bicycle and pedestrian mobility through the Project area. In the vicinity of the Project, the trail is located on the east side of the river. Replacing the US 6 bridge over the South Platte River and I-25 will not result in the conversion of this recreational facility to transportation use, but will require temporary closures and detours during bridge and ramp construction. The Section 6(f) boundary associated with the trail includes the Denver-owned lands in the South Platte River floodplain, according to information provided by State Parks. Currently, there is not an assumed need for conversion within the floodplain, but because this Project will be constructed as a design/build project, it is possible that the final design may include some small conversion, such as new bridge piers or water quality structures. As such, CDOT is working on the assumption that as much as five acres (but likely much less) may be converted from the South Platte River floodplain, since a conversion less than five acres is considered a *de minimus* conversion.

The table below shows the Section 6(f) conversion due to the Project as compared to the FEIS/2007 ROD.

Section 6(f) Resource	Conversion of Valley Highway Project FEIS/ROD Preferred Alternative (acres)	Conversion of Proposed Project (acres)
Barnum Park South	No conversion; Section 6(f) resources are located on opposite side of park, away from US 6 improvements	No conversion; Section 6(f) resources are located on opposite side of park, away from US 6 improvements
Barnum Park North	No conversion	0.63
South Platte River Floodplain	No conversion	Up to five acres, to be determined by the design/build contractor
Section 6(f) Resource	Conversion of Valley Highway Project FEIS/ROD Preferred Alternative (acres)	Conversion of Proposed Project (acres)

Barnum Park South	No conversion; Section 6(f) resources are located on opposite side of park, away from US 6 improvements	No conversion; Section 6(f) resources are located on opposite side of park, away from US 6 improvements
Barnum Park North	No conversion	0.63
South Platte River Floodplain	No conversion	Up to five acres, to be determined by the design/build contractor

Section 6(f) Finding

CDOT will assure that the mitigation plan for the project will include replacement of land for land at a one to one ration and equivalent value. The official conversion request will occur post-construction when the value of the land will be assessed prior to NPS final approval. There will be an equal value exchange for all Section 6(f) properties acquired. Such exchange will be valued according to the requirements of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 for both the property acquired and for any properties used as part of the payment. In all situations where the valuation of the property acquired exceeds the value of the property to be used as payment, the difference shall be paid as cash, and that cash shall be used in a manner consistent with Section 6(f) principles. Appraisals are conducted as part of CDOT's ROW process, which occurs once design is more complete and project funds have been identified.

Noise

A traffic noise analysis has been completed for the Project because it includes multiple capacity improvements that meet the definition of a Type I Project. The noise study describes the existing noise environment, predicts future noise levels, evaluates potential noise abatement, and evaluates construction noise effects.

The noise levels along the current roadways were measured at 19 locations, and existing and future No Build Alternative and Project peak noise levels were modeled for 31 locations using FHWA's Traffic Noise Model (TNM $^{\odot}$). Modeled noise levels range from 62 dBA $L_{eq(h)}$ to 75 dBA $L_{eq(h)}$ for the existing peak noise conditions. For the No Build Alternative and the Project, modeled noise levels ranged from 63 dBA $L_{eq(h)}$ to 76 dBA $L_{eq(h)}$ and 62 dBA $L_{eq(h)}$ to 77 dBA $L_{eq(h)}$, respectively.

A system of existing noise barriers are located north of and south of US 6 from Knox Court to Sheridan Boulevard. Noise levels for receptors located behind the barriers range from 62 to 74 dBA under existing conditions, and 63 to 75 dBA for future conditions with the Project.

Existing traffic noise levels at 84 residences, six park uses, and two trails meet or exceed the CDOT NAC (i.e., 66 dBA $L_{eq(h)}$ for residences and parks). Residences located nearest to US 6 make up most of the impacted sites along with several parks that currently experience noise levels above the NAC. Future year 2035 No Build traffic noise levels are predicted to meet or exceed the CDOT NAC at 113 residences, 10 park uses, and two trails and the Project's 2035 traffic noise levels are predicted to meet or exceed the noise abatement criteria at 107 residences, 10 park uses, and two trails.

Noise mitigation measures, including the placement of noise barriers have been evaluated to reduce traffic noise levels at noise impacted receptors. Mitigation measures were evaluated and not recommended as they did not meet CDOT's updated 2011 Criteria.

Construction

Construction noise would present the potential for short-term impacts to those receptors located along the corridor and along the designated construction access routes. The primary source of construction noise is expected to be diesel-powered equipment, such as trucks and earth moving equipment.

During project construction, areas adjacent would be exposed to construction noise in addition to the traffic-related noise. Noise from construction equipment can be mitigated using a variety of techniques including, but not limited to, restrictions on the times during the day construction can take place, proximity of construction equipment to sensitive receptors, use of alternative quieter equipment and techniques, and use of temporary noise control barriers and enclosures.

Section 36-6(b)(7) of the Denver code, from the Department of Environmental Health, states that the maximum permissible sound pressure levels specified in the code do not apply to sound emitted from construction equipment

operated between the hours of 7:00 a.m. and 9:00 p.m. (City and County of Denver, 1973). However, operation of construction equipment between the hours of 9:00 p.m. and 7:00 a.m. may not exceed the following maximum sound pressure levels or the ambient sound levels when they are equal to or exceed the noted sound levels, unless a noise variance has been granted, as per Section 3-6(2) specified as follows:

- 50 dB at the property line of a residential premise
- 60 dB at the property line of a commercial premise
- 75 dB at the property line of an industrial premise
- 70 dB anywhere on a public premise

Demolition and pile driving could be the loudest construction operations. Demolition of structures, such as existing bridges, is generally conducted at night because of safety issues requiring full or partial closure of the highway and local streets. Piles could be required at most major bridge installations. Alternative construction methods could replace pile driving in noise sensitive locations. The majority of noise receptors are located greater than 50 feet from areas where pile driving, or other high-noise activities, are expected. Noise impacts are expected to occur only in isolated areas along the project corridor.

Visual Resources and Aesthetics

Construction

Short-term construction-related visual impacts would likely occur as a result of this project. These impacts would include the presence of construction equipment and materials, temporary barriers, guardrail, detour pavement and signs, temporary shoring and retaining walls, lighting for night construction, and removal of vegetative cover.

Hazardous Materials

Based on the review of the 2005 MESA, FEIS, as well as a 2011 ISA, new information presented in the 2012 EDR and various other agency databases, the findings of the 2012 site reconnaissance, and the limited subsurface investigations conducted in December 2011, July 2012, and October 2012; there is a potential to encounter contaminated soil and groundwater throughout the Project area.

CDOT is conducting a Phase II investigation at the area under/around the BNSF Bridge and the area around the location of the Tunnel/I-25 Bridge to determine if soil/groundwater contamination is present in these areas.

In addition, given the results of the July and October 2012 subsurface investigations indicating that RCRA metals are most likely present in soil and groundwater throughout the Project area, present and historic contamination with petroleum hydrocarbons, acquisition of properties with known/suspected contaminated soil and groundwater, and documented presence of lead based paint on two of the bridge structures, a Materials Management Plan (MMP) and a Health and Safety Plan (HASP), as required by Section 250.03 of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 1999) will be used throughout the project area. Prior to demolition of any structures or removal of utility lines, materials abatement will be conducted, as necessary, according to Section 250, Environmental, Health, and Safety Management, of the CDOT Standard Specifications for Road and Bridge Construction (CDOT, 1999) and relevant Occupational Safety and Health Administration (OSHA) and other state and federal regulatory requirements.

MITIGATION:

All mitigation commitment(s) from NEPA document remain the same (discuss status and compliance):

Mitigation commitment(s) have changed from NEPA document. See Mitigation table in Appendix C.

V. Public/Agency Involvement (optional)

If any, document public meetings, notices, & websites, and/or document agency coordination. For each provide dates, and coordination, where applicable:

CDOT has created a public Project website at the link below where it has posted project materials including information presented at the one public open house that was held on September 12, 2012 at the Barnum Recreation Center. The

open house was attended by more than 60 stakeholders. Pre-meeting publicity included two e-newsletters sent to more than 200 stakeholders. A news release also was distributed to the Denver area news media.

http://www.coloradodot.info/projects/US6Bridges

More than 100 businesses in the project area were visited July 3, 2012 and July 5, 2012 to share project information, to gather contact information and to collect questions and talk about concerns business and property owners had about the project. Outreach to business owners also was conducted along Federal Boulevard in late August to ensure their concerns and questions were addressed and to collect their contact information for ongoing communications. The project fact sheet was translated to Spanish for this outreach and a Spanish-speaking member of the project team was present for the meetings. Most of the concerns and questions from all stakeholders dealt with property and construction impacts and access issues.

CODT has also coordinated with several agencies as described below.

CDOT worked with the City and County of Denver's Department of Public Works regarding general roadway and bridge design as well as construction procedures and traffic control. CDOT has coordinated with the City and County of Denver's Department of Parks and Recreation regarding the projects 4(f) and 6(f) impacts. (See correspondence in Appendix B).

CDOT met with the Urban Drainage and Flood Control District on December 21, 2011 regarding the South Platte River Master Plan and the design of the new South Platte River Bridge.

CDOT coordinated with the State Historic Preservation Office regarding the Section 106 review of the project's Area of Potential Effect, eligibility determinations and final determinations of effect. (See Agency Correspondence in Appendix B).

CDOT met with the Colorado Department of Health and Environment's Air Pollution Control Division on August 7, 2012 to determine the necessary air quality modeling assumptions and process.

CDOT has also coordinated through Colorado Parks and Wildlife with the National Park Service to confirm the 6(f) impacts and mitigations.

VI. Additional Studies Required for Proposed Action NA

VII.	Additional Requirements for Proposed Action
	An SEIS is required, because the changes to the proposed action will result in significant impacts not evaluated in the EIS.
	An SEIS is required, because new information or circumstances will result in significant environmental impacts not evaluated in the EIS.
	A revised ROD is required, because an alternative is recommended that was fully evaluated in an approved FEIS but was not identified as the preferred alternative.
	Appropriate environmental study or an EA is required, because the significance of new impacts is uncertain.
	A revised FONSI is required, because an alternative is recommended that was fully evaluated in an approved EA but was not identified as the preferred alternative.
	Other
\boxtimes	None

VIII. Permits Updated (optional)

This section is only required when the next stage of a project is going to construction. List permits:

Permits required for the Project will be coordinated with the appropriate jurisdiction and obtained prior to construction. Required permits and approvals for the Project are likely to include those shown in the table below. Additional permits may be required in concert with activities such as:

- Erosion control/grading
- Utility access, relocation, or surveying
- Construction, slope, and utility easements
- · Access and authorizations

Agency	Regulated Activity	Permit/App roval
USACE	Impacts to jurisdictio nal wetlands and Waters of the US	CWA Section 404 Permit
Federal Emergen cy Manage ment Agency (FEMA)	Floodplain encroach ment	Conditional Letter of Map Revision (CLMR); Letter of Map Revision

Colorad o Departm ent of Public Health and Environ ment – Water Quality Control Division	Municipal separate storm sewer system (MS4) Phase I and II Areas – New Developm ent and Redevelop ment Programs	Follow the requiremen ts of the CCD and CDOT MS4 discharge permits
Colorad o Departm ent of Public Health and Environ ment – Water Quality Control Division	Required to assess the quality of stormwat er runoff during constructi on	CDPHE Colorado Discharge Permit System (CDPS) stormwater permit associated with constructio n activity
Colorad o Departm ent of Public Health and Environ ment – Water Quality Control Division	Dewaterin g of constructi on areas	CWA Section 402 Constructio n Dewatering Permit, or Individual Constructio n Dewatering Permit if contaminat ed groundwate r is expected to be encountere d

Colorad o Departm ent of Public Health and Environ ment – Hazardo us Material s and Waste Manage ment Division	Generatio n of hazardous waste	Notification as RCRA hazardous waste generator
Colorad o Departm ent of Health and Environ ment – Air Pollution Control Division	General Air Pollution Emission Notice	Air Pollutant Emission Notice & Application for Constructio n Notice
Colorad o Departm ent of Health and Environ ment – Air Pollution Control Division	Emissions from portable units, such as rock crushers, generator s, asphalt plants, and cement plants, used during constructi on.	Stationary Source Air Quality Permit

Colorad o Departm ent of Public Health and Environ ment – Air Pollution Control Division	Bridge demolitio n and asbestos abatemen t.	Demolition Notification Application Form/Asbes tos Abatement
Colorad o Departm ent of Public Health and Environ ment – Air Pollution Control Division	Fugitive dust emissions due to constructi on activities and bridge demolitio n	Fugitive Dust Permit
CDOT	Generatio n of contamina ted materials during constructi on	Developme nt of Materials Manageme nt Plan with approval by the Regional Planning and Environmen tal Manager
Colorad o Division of Wildlife	Impacts to stream banks, stream channels, and riparian areas	Senate Bill 40 Certification
CCD	Occupanc y of ROW	Street Occupancy Permit

CCD	Constructi on of structures	Constructio n Permit
CCD	Traffic control during constructi on	Constructio n Access Permits Traffic Control Plan
CCD	Noise generatio n during constructi on	Noise Variance
CCD	Generatio n of contamina ted materials during constructi on	Coordinatio n and approval for handling and managemen t plan
CCD	Discharge of wastewat er generated during constructi on activities to the treatment works (if needed)	Wastewater Discharge Permit
CCD	Design and constructi on associated with City- maintaine d streets, parks, and sewers	Design and constructio n plan review

CD Vastew ter Manage nent Division	Discharge of groundwa ter to a City storm sewer	Discharge Permit	
CCD Parks and Recreati on Departm ent	Work in dedicated parks including the South Platte River Greenway and Trail	Occupancy Permit	
CCD Forester	Tree removal	Coordinatio n and approval	
A	gency	Regulate d Activity	Permit/Ap proval
USACE		Impacts to jurisdicti onal wetlands and Waters of the US	CWA Section 404 Permit
Federal En Managem (FEMA)	nergency ent Agency	Floodplai n encroach ment	Conditional Letter of Map Revision (CLMR); Letter of Map Revision

	Municipa	
Colorado Department of Public Health and Environment – Water Quality Control Division	separate storm sewer system (MS4) Phase I and II Areas – New Develop ment and Redevelo pment Programs	Follow the requireme nts of the CCD and CDOT MS4 discharge permits
Colorado Department of Public Health and Environment – Water Quality Control Division	Required to assess the quality of stormwat er runoff during construct ion	CDPHE Colorado Discharge Permit System (CDPS) stormwate r permit associated with constructio n activity
Colorado Department of Public Health and Environment – Water Quality Control Division	Dewateri ng of construct ion areas	CWA Section 402 Constructio n Dewatering Permit, or Individual Constructio n Dewatering Permit if contaminat ed groundwat er is expected to be encountere d

Pi Er H W	olorado Department of ublic Health and nvironment – azardous Materials and /aste Management ivision	Classifica tion of construct ion waste material and transport ation of solid wastes generate d	May require facility approval
	Colorado Department of Public Health and Environment – Hazardous Materials and Waste Management Division	Generati on of contamin ated materials during construct ion	Coordinati on and approval for handling and manageme nt plan
	Colorado Department of Public Health and Environment – Hazardous Materials and Waste Management Division	Generati on of hazardou s waste	Notificatio n as RCRA hazardous waste generator
	Colorado Department of Health and Environment – Air Pollution Control Division	General Air Pollution Emission Notice	Air Pollutant Emission Notice & Application for Constructio n Notice

Colorado Department of Health and Environment – Air Pollution Control Division	Emissions from portable units, such as rock crushers, generato rs, asphalt plants, and cement plants, used during construct ion.	Stationary Source Air Quality Permit
Colorado Department of Public Health and Environment – Air Pollution Control Division	Bridge demolitio n and asbestos abateme nt.	Demolition Notificatio n Application Form/Asbe stos Abatement
Colorado Department of Public Health and Environment – Air Pollution Control Division	Fugitive dust emissions due to construct ion activities and bridge demolitio n	Fugitive Dust Permit
CDOT	Generati on of contamin ated materials during construct ion	Developme nt of Materials Manageme nt Plan with approval by the Regional Planning and Environme ntal Manager

Colorado Division of Wildlife	Impacts to stream banks, stream channels, and riparian areas	Senate Bill 40 Certificatio n
CCD	Occupanc y of ROW	Street Occupancy Permit
CCD	Construct ion of structure s	Constructio n Permit
CCD	Traffic control during construct ion	Constructio n Access Permits Traffic Control Plan
CCD	Noise generatio n during construct ion	Noise Variance
CCD	Generati on of contamin ated materials during construct ion	Coordinati on and approval for handling and manageme nt plan
CCD	Discharge of wastewat er generate d during construct ion activities to the treatmen t works (if needed)	Wastewate r Discharge Permit

	CCD	Design and construct ion associate d with City-maintain ed streets, parks, and sewers	Design and constructio n plan review
•	CCD Wastewater Management Division	Discharge of groundw ater to a City storm sewer	Discharge Permit
	CCD Parks and Recreation Department	Work in dedicate d parks including the South Platte River Greenwa y and Trail	Occupancy Permit
	CCD Forester	Tree removal	Coordinati on and approval

IX. **Attachments Listed**

List permits, stud	List permits, studies, background data, etc.						
APPENDIX B	AGENCY COORDINATION LETTERS						
APPENDIX C	CDOT MITIGATION TRACKING FORM						
APPENDIX D	AESTHETICS AND URBAN DESIGN TECHNICAL REPORT						
APPENDIX E	AIR QUALITY TECHNICAL REPORT						
APPENDIX F	ARCHAEOLOGY AND PALEONTOLOGY TECHNICAL REPORT						
APPENDIX G	BIOLOGICAL RESOURCES REPORT						
APPENDIX H	HAZARDOUS MATERIALS TECHNICAL REPORT						
APPENDIX I	CULTURAL RESOURCES TECHNICAL REPORT						
APPENDIX J	NOISE AND VIBRATION TECHNICAL REPORT						
APPENDIX K	SECTION 4(F) AND SECTION 6(F) TECHNICAL REPORT						
APPENDIX L	TRANSPORTATION ANALYSIS TECHNICAL REPORT						
APPENDIX M	WATER QUALITY REPORT						
APPENDIX N	TECHNICAL MEMORANDUM SUMMARIZING CHANGES FROM FEIS AND IMPACTS						
	FOR LAND USE, SOCIAL AND ECONOMIC RESOURCES, ENVIRONMENTAL						

JUSICE, FARMLANDS, ENERGY, AND CUMULATIVE EFFECTS