Finding of No Significant Impact and Final 4(f) Evaluation
Bigelow Gulch Road/Forker Road Urban Connector • Havana Street to Sullivan Road • CRP 2784 & CRP 2789 • April 2008
Bigelow Gulch Road/Forker Road Urban Connector  
Havana Street to Sullivan Road  
Spokane County, Washington  
Finding of No Significant Impact (FONSI)  

Issued pursuant to  
42 USC 4332(2) © and 23 USC 128(a)  
U.S. Department of Transportation  
Federal Highway Administration (FHWA)  
and  
Washington State Department of Transportation (WSDOT)  
and  
Spokane County Public Works Department  

In accordance with the National Environmental Policy Act (NEPA) and subsequent implementing regulations of the Council on Environmental Quality (CEQ) (40 CFR 1500-1508) and 23 CFR 771, the Federal Highway Administration has determined the selected alternative to be the Bigelow Gulch Road/Forker Road Urban Connector Project, an approximately 8.2-mile four-lane roadway with alternating gravel medians and two-way left turn pockets and paved shoulders which would begin in the west near the Havana Street/Bigelow Gulch Road intersection, and would terminate in the east at the Sullivan Road/Wellesley Avenue intersection. The Revised Environmental Assessment (EA) has been independently evaluated and determined to adequately and accurately discuss the purpose and need, environmental issues, and potential impacts of the proposed action with appropriate mitigation measures. Therefore, the action will not require the preparation of an Environmental Impact Statement (EIS). FHWA takes full responsibility for the accuracy, scope, and content of the Environmental Assessment for this proposed action.  

10 April, 2008  
Dean Moberg  
Date of Approval  
Area Engineer, Washington Division  
Federal Highway Administration  

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Acronyms and Abbreviations

AADT Average Annual Daily Traffic
AASHTO American Association of State Highway Transportation Officials
ac acres
ADT Average Daily Traffic
AHS Archaeological and Historical Services
APE
ASA
BA
BMPs
CAO
CARA
CEC
CEQ
CFR
cfs
CO
Corps
CRP
cu yd
CWA
DAHP
dB
dBA
DE
DHVs
DNR
DOT
DPL/DEOG
EA
Ecology
EIS
EO
EPA
ESA

Area of Potential Effect
Aquifer Sensitive Area
Biological Assessment
best management practices
Critical Areas Ordinance
Critical Aquifer Recharge Area
Cation Exchange Capacity
Council of Environmental Quality
Code of Federal Regulation
cubic feet per second
carbon monoxide
U.S. Army Corps of Engineers
County Road Project
cubic yard
Clean Water Act
Washington State Department of Archaeology and Historic Preservation
decibel
A-weighted decibels
Diesel exhaust
design hourly volumes
Washington State Department of Natural Resources
U.S. Department of Transportation
diesel particulate matter/diesel exhaust organic gases
Environmental Assessment
Washington State Department of Ecology
Environmental Impact Statement
Executive Order
Environmental Protection Agency’s
Endangered Species ct
FEMA | Federal Emergency Management Agency
FHWA | Federal Highway Administration
FONSI | Finding of No Significant Impact
FPPA | Farmland Protection Policy Act
GIS | Geographic Information System
HHS | U.S. Department of Health and Human Services
hmvm | hundred mvm
HPA | Hydraulic Project Approval
I | Intactness
I-90 | Interstate 90
IRIS | Integrated Risk Information System
ISA | Initial Site Assessment
JARPA | Joint Aquatic Resources Permit Application
LDR | Low Density Residential
L_{eq} | equivalent sound level
lf | linear feet
LOS | Level of Service
MBTA | Migratory Bird Treaty Act
MOU | memorandum of understanding
MP | milepost
mph | miles per hour
MSATs | Mobile Source Air Toxics
MTCA | Model Toxic Control Act Cleanup Regulation
MUTCD | Manual on Uniform Traffic Control Devices
mvm | million vehicle miles
NAAQS | National Ambient Air Quality Standards
NATA | National Air Toxics Assessment
National Register | National Register of Historic Places
NEPA | National Environmental Policy Act
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>NHPA</td>
<td>National Historic Preservation Act</td>
</tr>
<tr>
<td>NLEV</td>
<td>national low emission vehicle</td>
</tr>
<tr>
<td>NMFS</td>
<td>National Marine Fisheries Service</td>
</tr>
<tr>
<td>No Action</td>
<td>no action alternative</td>
</tr>
<tr>
<td>NO$_2$</td>
<td>nitrogen dioxide</td>
</tr>
<tr>
<td>NOI</td>
<td>Notice of Intent</td>
</tr>
<tr>
<td>NO$_x$</td>
<td>oxides of nitrogen</td>
</tr>
<tr>
<td>NPDES</td>
<td>National Pollutant Discharge Elimination System</td>
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<tr>
<td>NRCS</td>
<td>Natural Resources Conservation Service</td>
</tr>
<tr>
<td>NSC</td>
<td>North Spokane Corridor</td>
</tr>
<tr>
<td>NWI</td>
<td>National Wetlands Inventory</td>
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<tr>
<td>O$_3$</td>
<td>ozone</td>
</tr>
<tr>
<td>OAHP</td>
<td>Washington Office of Archaeology and Historic Preservation</td>
</tr>
<tr>
<td>OFM</td>
<td>Washington State Office of Financial Management</td>
</tr>
<tr>
<td>PEM</td>
<td>palustrine emergent wetland</td>
</tr>
<tr>
<td>PFO</td>
<td>palustrine forested wetland</td>
</tr>
<tr>
<td>PHS</td>
<td>Priority Habitats and Species</td>
</tr>
<tr>
<td>PM</td>
<td>particulate matter</td>
</tr>
<tr>
<td>PM$_{10}$</td>
<td>fine particulate matter</td>
</tr>
<tr>
<td>PM$_{2.5}$</td>
<td>particulate matter with a diameter less than or equal to 2.5 microns</td>
</tr>
<tr>
<td>PCBs</td>
<td>polychlorinated biphenyls</td>
</tr>
<tr>
<td>POW</td>
<td>palustrine open water wetland</td>
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<tr>
<td>PSS</td>
<td>palustrine scrub-shrub</td>
</tr>
<tr>
<td>RCW</td>
<td>Revised Code of Washington</td>
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<tr>
<td>RFG</td>
<td>reformulated gasoline</td>
</tr>
<tr>
<td>ROW</td>
<td>right-of-way</td>
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<tr>
<td>SAFETEA-LU</td>
<td>Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users</td>
</tr>
<tr>
<td>SCAPCA</td>
<td>Spokane County Air Pollution Control Authority</td>
</tr>
<tr>
<td>SCAs</td>
<td>Sanitary Control Areas</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<td>--------------</td>
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<tr>
<td>SCC</td>
<td>Spokane County Code</td>
</tr>
<tr>
<td>SDWA</td>
<td>Safe Drinking Water Act of 1974</td>
</tr>
<tr>
<td>SEPA</td>
<td>State Environmental Policy Act</td>
</tr>
<tr>
<td>SHPO</td>
<td>Washington State Historic Preservation Office</td>
</tr>
<tr>
<td>SO₂</td>
<td>sulfur dioxide</td>
</tr>
<tr>
<td>SPCC</td>
<td>Spill Prevention, Control and Countermeasures</td>
</tr>
<tr>
<td>Spokane County</td>
<td>Spokane County Public Works Department</td>
</tr>
<tr>
<td>SR</td>
<td>State Route</td>
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<tr>
<td>SRTC</td>
<td>Spokane Regional Transportation Council</td>
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<tr>
<td>SVRP</td>
<td>Spokane Valley-Rathdrum Prairie</td>
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<tr>
<td>SVRP Aquifer</td>
<td>Sole Source Aquifer</td>
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<tr>
<td>SWPPP</td>
<td>Stormwater Pollution Prevention Plan</td>
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<tr>
<td>TCPs</td>
<td>Traditional Cultural Properties</td>
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<tr>
<td>TESC</td>
<td>Temporary Erosion and Sediment Control</td>
</tr>
<tr>
<td>TIP</td>
<td>Transportation Improvement Program</td>
</tr>
<tr>
<td>TMDL</td>
<td>Total Maximum Daily Load</td>
</tr>
<tr>
<td>TNM</td>
<td>Traffic Noise Model</td>
</tr>
<tr>
<td>TRB</td>
<td>Transportation Research Board</td>
</tr>
<tr>
<td>U</td>
<td>Unity</td>
</tr>
<tr>
<td>UGA</td>
<td>Urban Growth Area</td>
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<tr>
<td>UIC</td>
<td>Underground Injection Control</td>
</tr>
<tr>
<td>UNOS</td>
<td>Urban Natural Open Space</td>
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<tr>
<td>URA</td>
<td>Urban Reserve Area</td>
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<tr>
<td>Urban Connector Alignment</td>
<td>Bigelow Gulch Road/Forker Road Urban Connector—Havana Street to Sullivan Road</td>
</tr>
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<td>USC</td>
<td>U.S. Code</td>
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<tr>
<td>USDA</td>
<td>U.S. Department of Agriculture</td>
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<tr>
<td>USFWS</td>
<td>U.S. Fish and Wildlife Service</td>
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<tr>
<td>USGS</td>
<td>U.S. Geological Survey</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
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<tr>
<td>V</td>
<td>Vividness</td>
</tr>
<tr>
<td>V/C</td>
<td>volume to capacity ratio</td>
</tr>
<tr>
<td>VMT</td>
<td>vehicle miles traveled</td>
</tr>
<tr>
<td>VOCs</td>
<td>volatile organic compounds</td>
</tr>
<tr>
<td>vph</td>
<td>vehicles per hour</td>
</tr>
<tr>
<td>WAC</td>
<td>Washington Administrative Code</td>
</tr>
<tr>
<td>WDFW</td>
<td>Washington State Department of Fish and Wildlife</td>
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<td>WHPA</td>
<td>Wellhead Protection Areas</td>
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<td>WNHP</td>
<td>Washington Natural Heritage Program</td>
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<tr>
<td>WRIA</td>
<td>Water Resource Inventory Areas</td>
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<td>WSDOT</td>
<td>Washington State Department of Transportation</td>
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</tbody>
</table>
Project Purpose

The project purpose is to improve safety and operational conditions along the Bigelow Gulch/Forker corridor by:

- increasing roadway capacity,
- improving transportation system linkage, and
- accommodating existing and future freight linkages between areas north of Spokane (City and County) to the industrial and retail areas east of Spokane and Interstate (I) -90.

Additionally, the project objectives are to achieve:

- improved connections between major freight handlers and their primary destinations;
- subregional connections for businesses and employers; and
- support for the Spokane County and Cities of Spokane and Spokane Valley comprehensive plans through provision of transportation infrastructure between Spokane County, the City of Spokane, and the City of Spokane Valley warehouse and industrial zones. The industrial-zoned areas are located on the western and eastern ends of the Bigelow Gulch/Forker corridor.

Prompted by the update of the Spokane County Comprehensive Plan in May 1997, citizens and community leaders began exploring the concept of an urban connector road system to accommodate expected increases in traffic volumes in Spokane County. The report, Connecting our Community—A Regional Study of Urban Connectors referred to as the “Connector Study”, identified a number of high-volume traffic corridors, one of which was the Bigelow Gulch Road/Forker Road corridor, defined as Bigelow Gulch Road between Old Argonne Road and Forker Road, and Forker Road from Bigelow Gulch Road to Wellesley Road (Bigelow Gulch/Forker corridor).

The Connector Study identified the Bigelow Gulch/Forker corridor as having declining vehicle capacity and high collision rates. The Bigelow Gulch/Forker corridor is one of several corridors identified in the study as requiring increased capacity and improved freight mobility.

The Connector Study also recommended transportation improvements that would provide sufficient vehicle capacity, improve traveler safety, improve freight mobility, ease current traffic congestion, improve the general air quality, and meet the objective of improved infrastructure under the Washington State Growth Management Act.
Project Need

The specific need components are as follows:

**Transportation Demand**
Transportation demand is expected to exceed the current capacity of the Bigelow Gulch/Forker corridor. This increase will trigger the need for a direct, more efficient route between Francis Avenue on the west and Sullivan Road to the east.

**Transportation Capacity and Roadway Deficiencies**
Average Daily Traffic (ADT) represents the average number of vehicles that travel a roadway on a typical day. The 2003 ADT on Bigelow Gulch Road west of Argonne Road was 10,048 trips; that number is projected to increase to 12,000 trips by 2025 if no changes are made to the current infrastructure (No Action). The 2003 ADT on Bigelow Gulch Road (east of Argonne Road) was 7,563 trips; that number is projected to remain approximately level through 2025 under No Action.

**Safety**
From January 1, 1994, to October 31, 2006, 546 collisions were reported on Bigelow Gulch Road and Forker Road in the project area, an average of 43 collisions per year. This represents a collision rate of approximately 1.68 per million vehicle miles, higher than the average 1.34 per million vehicle miles rate for state highways in eastern Washington.

**Area Road Connections**
The Connector Study identified the Bigelow Gulch/Forker corridor as an important regional transportation link between the arterial network in the northern part of Spokane County and the cities of Spokane and Spokane Valley. The corridor links two roadways classified as rural major, two classified as major principal, and one state highway.

Phase 1 of the North Spokane Corridor, which is currently under construction, is expected to result in increased traffic and demand along arterial links to Interstate (I)-90, including the Bigelow Gulch/Forker corridor. The expansion of Bigelow Gulch Road will provide some measure of relief to the capacity constraints along those north-south arterials within the City of Spokane until the North Spokane Corridor is linked directly to I-90.
Goals and Policies of the Spokane County Comprehensive Plan

The Spokane County Comprehensive Plan includes goals that focus on improving transportation infrastructure to support existing and planned growth as required by GMA. The area west of the Bigelow Gulch/Forker corridor is one of the larger industrial and commercial subareas in Spokane County, so it is essential that these areas have access to regional routes and interstate freeways.

Freight Transport

The Bigelow Gulch/Forker corridor is a heavily used truck route that carries between 4 and 10 million tons of freight annually (based on vehicle counts for the years 2000 and 2004). It was identified as a high priority in the 2003 Activities and Recommendations Report of the Washington State Freight Mobility Strategic Investment Board.

Description of Proposed Action

On January 27, 2006, the Spokane County Public Works Department, the Federal Highway Administration (FHWA), and the Washington State Department of Transportation (WSDOT) issued a National Environmental Policy Act Environmental Assessment (EA) and Section 4(f) Evaluation for proposed Bigelow Gulch/Forker Road project. Public review of the EA included an extended comment period, public open houses, and a public hearing held March 22, 2006.

Following public review of the January 2006 EA, the Federal Highway Administration (FHWA) concluded that a Revised EA should be prepared to address public comments and to expand analysis of impacts of several elements of the environment.

On November 8, 2007, the Revised EA and Section 4(f) Evaluation for the proposed Bigelow Gulch/Forker Road Urban Connector was issued for a 30-day review period ending December 8, 2007. At the request of the public, the Spokane County Commissioners granted an extension of the comment period to January 11, 2008, a 64-day review period to allow for additional time to review the Revised EA.

The revised EA included a project description with changes to the proposal that occurred since issuance of the January 2006 EA; an expanded discussion of project alternatives, including the engineering analysis used to select the proposed project; an expanded analysis of the elements of the environment; and a restatement of the Section 4(f) Evaluation. Socioeconomics and cumulative effects were added as new sections to the EA. Appendices presented the distribution list, mitigation commitments, public comments and responses to the 2006 EA, a discussion of...
farmlands, and an addendum to the cultural resources report previously provided as an appendix to the January 2006 EA.

The proposed Urban Connector Alignment would be constructed along the existing Bigelow Gulch Road and Forker Road corridor. The 8.2-mile-long project would begin in the west near the Havana Street/Bigelow Gulch Road intersection, which is the terminus of North Spokane Corridor, Phase I (NSC - Phase I) and terminate in the east at the Sullivan Road/Wellesley Avenue intersection in the City of Spokane Valley (Figures 1 and 2).

**Figure 1. Location of Bigelow Gulch Urban Connector Project**

From Havana Street on the eastern edge of the City of Spokane to Forker Road (approximately 7.4 miles), the new roadway would be a rural-type, four-lane roadway with alternating gravel median to two way left turn pockets and paved shoulders. Between Forker Road and Wellesley Avenue (approximately 0.8 mile), the new roadway would be an urban-type four-lane roadway with two-way left turn pockets, bike lanes and sidewalks.
A 0.75-mile portion of the alignment right-of-way from west of Jensen Road to just east of Argonne Road would be reduced in width from 120 to 80 feet and shifted slightly south to avoid the historic Karl Paulson Farmstead on Bigelow Gulch Road. The reduced width would be accomplished by reducing the speed limit from 45 to 35 mph within that 0.75-mile portion of the alignment. The Urban Connector Alignment project would straighten and widen the existing Bigelow Gulch and Forker Roads to meet the objectives of improved safety, reduced congestion, and support of state and regional freight mobility initiatives.

Transportation analysis completed for the project shows that the Sullivan Corridor (from SR-290 to Sprague Avenue) is the destination and/or generation point for the majority of the trips on the Bigelow Gulch / Forker Corridor. The Corridor provides connection between the commercial and industrial areas on the north side of the City of Spokane (at the western end of the project) and the City of Spokane Valley (along Sullivan Road, at the eastern end of the project) (Figure 2). Sullivan Road provides access to both SR-290 and I-90, passing through the major industrial area in the City of Spokane Valley which lies between the two roadways. It also provides direct access to the major commercial sites located in the vicinity of the I-90/Sullivan Road interchange (Figure 2).

Since preparation of the January 2006 EA, Spokane County made several changes to the proposed action to further improve safety and reduce impacts. These included:

- Addition of a southbound underpass to Bigelow Gulch Road from Forker Road to improve intersection LOS and safety. Right turns onto Bigelow Gulch Road from Forker Road would still be stop sign controlled.
- Modification to a portion of the Forker Road alignment. The Urban Connector Alignment would include the modification of approximately 2,300 linear feet of roadway along Forker Road from just south of its intersection with Jacobs Road south to its intersection with Progress Road.
- Addition of stormwater detention basins in the footprint of the bypassed roadway between Palmer Road and Old Bigelow Gulch Road.
- Restoration of approximately 7.8 acres of Bigelow Gulch roadway bypassed by the new alignment at the east and west ends of the alignment to native habitat for wildlife. In total, approximately 7.8 acres (339,975 square feet) of existing roadway (impervious surface) would be removed, regraded, and revegetated to partially compensate for the loss of wildlife habitat from construction of the proposed alignment.
Public Involvement

Public involvement was conducted for both the Revised EA and the January 2006 EA. Activities included public notification of the availability of the EAs, notices of public open houses and public hearings, and responses to public comments. Additionally, Spokane County provided either paper copies or CDs of the Revised EA to all commenters of the 2006 EA. The following paragraphs provide a summary of the public involvement for the two documents.

2007 Revised EA

Public Review

A 30-day review period followed the November 8, 2007 issuance of the Revised EA and Section 4(f) Evaluation. The comment period was extended to January 11, 2008 (64 day comment period) at the request of the public. The Revised EA was made available at the following locations:

- Spokane County Public Works office
- Spokane County Public Works Website at http://www.spokanecounty.org/engineer/
- Argonne Public Library
- Spokane Public Library

The Notice of Availability and the Revised EA were provided directly to the following agencies and citizens:

- Elected officials, tribes, and city administrators for jurisdiction within the project area;
- Regulatory agencies, cooperating agencies, and all other agencies that had expressed interest in the project; and
- Citizens commenting on the January 2006 EA were sent CD copies of the revised EA, paper copies of the Revised EA, or notification by e-mail of the availability of the Revised EA.

In addition, Spokane County published a legal Notice of Availability of the Revised EA in the:


The extension of the comment period until January 11, 2008, was published as a legal notice in the:
Open House Meeting

An open house meeting sponsored by Spokane County Public Works was held from 4:30 to 7:30 p.m. at the East Valley Middle School on November 14, 2007. The meeting included the opportunity for the public to review and discuss displays and handout materials, and to discuss the proposed project with the engineering and environmental team working on the project. Approximately 198 people attended. The Notice of the Open House was advertised:

- by letter from Bob Brueggeman, Spokane County Engineer on November 6, 2007 to businesses, special districts, school districts, commissioners, legislators, and other public representatives,
- on the Spokane County Public Works Web site on November 7, 2007,
- in the Spokesman-Review on November 6 and 13, 2007 (Affidavit of Publication), and
- on 4-by-8-foot signs placed at seven locations within the Bigelow Gulch and Forker roads project area.

Public Hearing

A Public Hearing was held November 26, 2007 from 4:30 to 7:30 p.m., at the Spokane Christian Center located at 8909 E. Bigelow Gulch Road. The notice of the public hearing was advertised as follows:

- on the Spokane County Public Works Web site on November 7, 2007,
- The Spokesman-Review on November 12 and 15, 2007 (Affidavit of Publication), and
- Posted notice on seven 4’ x 8’ signs located along Bigelow Gulch/Forker Road.

The public hearing offered the opportunity to provide verbal comments documented by a court reporter, or to provide written comments to Spokane County. Approximately 72 people attended, of which 18 people provided testimony. Of the 18 people providing testimony, 11 were against the project, three were in favor of the project, and four were neutral. A paper copy of the public hearing transcript is available for public review at the Spokane County Public Work’s office, and is available in PDF format on the FONSI CD and at the Spokane County website at: http://www.spokanecounty.org/engineer/
Summary of Comments

The number and format of comments on the revised EA that were submitted during the comment period (November 8, 2007 to January 11, 2008) include the following:

- 80 written comment letters and/or e-mails were submitted directly to Spokane County of which comments letters were from two federal agencies (U.S. EPA and the Department of the Interior), one state agency (Washington Department of Ecology), one university (Eastern Washington State University), and one city (City of Spokane Valley) provided written comments,
- 19 comments forms were submitted at the open house meetings,
- 1 letter was directed to Washington State Senator Bob Morton,
- 18 individuals provided verbal testimony at the public hearing, which was recorded in the hearing transcript.

A total of 100 comment letters, forms, or e-mails were received during the comment period. A total of 573 comments were received from the letters and public testimony. These comments covered a variety of issues including the transportation and safety, public involvement process, NEPA process, traffic analysis, land use and right-of-way acquisition, vegetation and wildlife, groundwater, noise, air quality, project cost, and cultural resources. The majority of comments received were from local citizens in and around the Urban Connector Alignment project area and users of Bigelow Gulch Road. Of the 100 comment letters, 62 were favorable to the project, 25 were against the project (note: multiple letters were submitted by five commenters), and 13 were neutral.

Table 1 presents a summary of the key comments received on the Revised EA.

Table 1. Summary of Comments and Responses to Key Issues from Comment Letters and Public Hearing Testimony

<table>
<thead>
<tr>
<th>Comment</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Involvement - The review period for the Revised EA was too short</td>
<td>The comment period was extended from November 8, 2007 until January 11, 2008, a 64-day comment period.</td>
</tr>
<tr>
<td>NEPA - The size of the Revised EA was much larger than the guidelines recommend</td>
<td>The size (number of pages) for Environmental Assessments is a guideline. EAs vary in size and complexity based on the level of environmental analysis necessary for each specific project.</td>
</tr>
<tr>
<td>Noise - Noise mitigation for the project is nonexistent</td>
<td>The allowance for noise mitigation following WSDOT protocol has been explained in Appendix 6 (Revised Noise Discipline Report) as well as in section 4.11 (Noise) of the Revised EA. Spokane County has committed to addressing noise on a parcel-by-parcel basis as part of project design.</td>
</tr>
<tr>
<td>Vegetation/Aesthetics - No mitigation for loss of roadside vegetation</td>
<td>Mitigation for loss of roadside vegetation has been addressed in section 4.12.7 (page 4.12-23) of the Revised EA, and presented in Attachment D (Mitigation Commitments) of the FONSI.</td>
</tr>
<tr>
<td>Pedestrians - Concern regarding</td>
<td>The project now includes an option for either a pedestrian tunnel or a</td>
</tr>
<tr>
<td>Comment</td>
<td>Response</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>pedestrian tunnel between middle and high schools</td>
<td>pedestrian bridge across Sullivan Road.</td>
</tr>
<tr>
<td>Transportation - Roadway improvements will be needed on Francis Ave.</td>
<td>Spokane County has discussed improvements with the City and will continue to cooperate with the City in the development of their project.</td>
</tr>
<tr>
<td>west of Havana St.</td>
<td></td>
</tr>
<tr>
<td>Wildlife - Detention ponds and swales will attract wildlife,</td>
<td>Ponds and swales will be designed to infiltrate into soil to minimize standing water. Surface water (streams, wetlands) currently exists at</td>
</tr>
<tr>
<td>particularly deer and elk</td>
<td>several locations near the proposed swales and detention ponds, thus providing a source of water for wildlife.</td>
</tr>
<tr>
<td>Transportation – need for acceleration and deceleration lanes at</td>
<td>The need for acceleration and deceleration lanes will be determined during the design phase.</td>
</tr>
<tr>
<td>Forker Road connection to the proposed roadway</td>
<td></td>
</tr>
<tr>
<td>Transportation – Concern that the project will create traffic</td>
<td>Impacts to Sullivan Road were addressed in the Revised EA on page 4.9-23. The traffic volumes on Argonne south of Bigelow Gulch would be</td>
</tr>
<tr>
<td>problems on Argonne Road in the Town of Millwood and in the City of</td>
<td>lower with the proposed Connector than under No-action.</td>
</tr>
<tr>
<td>Spokane Valley at Sullivan Road</td>
<td></td>
</tr>
<tr>
<td>Transportation – The Bigelow Road represents a significant safety</td>
<td>Thank you for your comment.</td>
</tr>
<tr>
<td>hazard and needs to be built.</td>
<td></td>
</tr>
<tr>
<td>Water Quality – Stormwater pollution prevention plan will be required</td>
<td>A Stormwater Pollution Prevention Plan and water quality permit applications will be prepared and submitted during the design phase of</td>
</tr>
<tr>
<td>before construction.</td>
<td>the project and prior to construction.</td>
</tr>
<tr>
<td>Transportation – The North Spokane Corridor (NSC) will stop at</td>
<td>While there is a considerable amount of work to be done and future funding to be secured, WSDOT is very actively pursuing efforts on the NSC both north and south of the Francis Avenue area. With approximately $152 million dollars of funding from the Transportation Partnership Account (TPA) and other sources, WSDOT is actively pursuing design, right of way, and minor construction efforts for the NSC south of Francis Avenue. This includes actively purchasing needed right of way along the I-90 corridor, where the NSC and I-90 will connect.</td>
</tr>
<tr>
<td>Francis Ave. exit if the Bigelow Gulch project is completed.</td>
<td></td>
</tr>
<tr>
<td>Land Use – The project will deliver urban sprawl</td>
<td>The impacts of the project on changes in land use that could lead to urban sprawl were evaluated in the land use section (section 4.7) and Cumulative Impacts section of the Revised EA (section 4.17). No changes in land use or current zoning are proposed as part of the proposed project.</td>
</tr>
<tr>
<td>Traffic, Transportation - Outdated or inaccurate traffic study</td>
<td>The forecast traffic volumes used in the analysis were developed by the SRTC with collaborative review by WSDOT, City of Spokane, City of Spokane Valley and Spokane County. The regional travel demand model was deemed the appropriate data set from which to evaluate future transportation project impacts. Please see Table E-2 responses to letter 88, comments 1 through 19.</td>
</tr>
<tr>
<td>information was used</td>
<td></td>
</tr>
<tr>
<td>Cultural Resources – Concerned that the Addendum Cultural Resources</td>
<td>Commenter did not have a copy of the 2005 “Cultural Resources Assessment for Bigelow Gulch/Forker Road Urban Connector Project” which had previously been included as Appendix E in the January 2006 EA. A copy of the report was sent to the commenter.</td>
</tr>
<tr>
<td>Survey Report did not cover the entire project.</td>
<td></td>
</tr>
<tr>
<td>Transportation – Access and egress concerns to private property.</td>
<td>During the design phase, Spokane County will work with land owners regarding specific access and egress considerations to and from the properties.</td>
</tr>
<tr>
<td>Comment</td>
<td>Response</td>
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</tr>
<tr>
<td>Cultural Resources – Decision to avoid Karl Paulson Farmstead and include ROW only on the Weston Trust property. Inequitable burden for the Trust to bear. Request use of de minimus to use Farmstead property.</td>
<td>As required by 4(f) requirements, avoidance of the property was based on the eligibility for listing, not on a formal listing. All properties required for the project will be acquired by Spokane County based on the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended.</td>
</tr>
<tr>
<td>Transportation – Speed limit should be 35 m.p.h. instead of 45 m.p.h.</td>
<td>A 35 mph speed limit (rural areas) would be unrealistically slow to the majority of drivers, would be unenforceable, and is not proven to be safer.</td>
</tr>
<tr>
<td>Project Purpose and Need - EPA recommended that the Revised EPA provide a need statement and background information that describes the safety issues, freight needs and projections, linkage and capacity deficiencies.</td>
<td>The Purpose and Need statement is presented in section 2.2 of the Revised EA. Each element of the purpose and need is described in subsections to section 2.2.</td>
</tr>
<tr>
<td>Streams - Provide an explanation as to why stream realignments are necessary.</td>
<td>One of the goals of the roadway improvement project is to utilize as much of the existing roadway as possible, thereby limiting, to the extent possible, impacts to undeveloped lands. The impact to streams would occur where the stream channels occur parallel to the existing roadway and/or areas confined by steep terrain. Given the proximity of the stream channels to the proposed roadway, it was not possible to avoid impacts and realignments. See response to comment 48-3 for further explanation.</td>
</tr>
<tr>
<td>Air Quality - Mobile Source Air Toxics (MSATs). Provide thorough analysis to characterize potential human health risks from the proposed project and add emissions-reduction mitigation measures for construction.</td>
<td>FHWA does not expect emissions to increase over present levels at any location, and in fact, MSAT emissions are expected to steadily decline in the future. The average daily traffic volumes will increase in the future under both the No Action and Proposed Action, but the expected reduction in per-vehicle MSAT emissions is expected to outweigh the increase in traffic volume. See response to comments 48-4 through 48-8 for further explanation.</td>
</tr>
<tr>
<td>Wildlife – Recommend installing wildlife crossings.</td>
<td>Records indicate that deer – vehicle collisions are relatively low. As indicated in Attachment D (Mitigation Commitments), Spokane County will evaluate the feasibility and benefits of installing a wildlife undercrossing at the west end of Bigelow Gulch Road.</td>
</tr>
<tr>
<td>Cumulative Impacts - While land use changes are the direct result of local planning decisions, there may be indirect impacts associated with transportation projects that affect the rate and pattern of development. A reasonable expectation for this urban connector project is that there will be changes in travel times, which will likely affect trip frequency and length, resulting in overall traffic increases.</td>
<td>The expectation that the project will result in a change in travel times and trip frequency and length is already included in the traffic modeling for future conditions (2025). Future traffic volumes were developed based upon the SRTC Interim Regional Travel Demand Model (VISSUM Model). See response to comments 48-12 and 48-13 for further explanation.</td>
</tr>
<tr>
<td>Vegetation - We recommend that disturbed areas be revegetated using native species and that there be ongoing maintenance (wholly or primarily non-chemical means) to prevent establishment of invasives in areas disturbed by project activities.</td>
<td>Additional Mitigation Commitments have been added to address invasive species. These mitigation commitments have included the preparation of an invasive species control plan and coordination with the Spokane Noxious Weed Board.</td>
</tr>
<tr>
<td>Comment</td>
<td>Response</td>
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</tr>
<tr>
<td>Transportation – School buses. Some children would have to cross 5 lanes to get to the bus stop. Concern that the bus route and time will be lengthened.</td>
<td>School bus routes are required to serve each side of the roadway on all roadways with 3 or more lanes (see RCW 28A.160.115). Therefore, children will not have to cross the road to access the bus stop. There should not be any increase in bus route length or time.</td>
</tr>
<tr>
<td>Transportation – Potential impacts to the Hillyard Neighborhood including encouraging new vehicular traffic to traverse NE Spokane City and adjacent County neighborhoods</td>
<td>The project will not encourage new vehicular neighborhood traffic but connect at already designated arterials. See response to comments 84-3 through 84-11 for further explanation.</td>
</tr>
<tr>
<td>Project Cost – Not included in the Revised EA</td>
<td>We apologize that the cost information was not presented in the front sections of the Revised EA. The cost was presented in Chapter 5 (page 5-13) as $52.6 million and in response to comment 163-18 in Appendix 3, Table 3-3 Response to Public Hearing comments.</td>
</tr>
<tr>
<td>Public Involvement – Comments made at the March 22, 2006 public hearing by the Spokane County Engineer were removed in the response to comments table in Appendix 3 of the Revised EA.</td>
<td>The comments given by the public during the hearing and the official Spokane County responses are presented Table 3-3 of Appendix 3. The proper procedure for the public hearing is for the public to provide testimony and not to have verbal responses to that testimony. The written responses to that testimony were presented in Table 3-3 in lieu of comments provided by Ross Kelley.</td>
</tr>
<tr>
<td>Public Involvement: Request that information (written materials and videos) be entered into the record.</td>
<td>DVDs of the February 2006 meetings and the video are available at the Spokane County Public Works office. As previously mentioned, Appendix 3 of the Revised EA includes coded excerpts of the comment letters with responses, with the letters posted on the Spokane County website.</td>
</tr>
<tr>
<td>Transportation - The Revised EA states that Bigelow Gulch carries between 4 and 10 million tons of freight annually based on year 2000 and 2004 vehicle counts. What was the method and studies used to determine the actual freight on the roadway?</td>
<td>A multiple-day vehicle classification study was conducted with a tube counter that classified vehicles according to the Federal Highway Administration (FHWA) scheme F (an algorithm created by Maine DOT in the mid 1980’s). Total vehicle volume and the breakdown of trucks were then entered into an Excel spreadsheet, created by the County Road Administration Board (CRAB) that used truck weights created by the Washington State Department of Transportation (WSDOT) Transportation Data Office (TDO) based on previous studies. These total tonnage figures were then converted to an annual gross tonnage figure to determine the overall classification of the road. See response to comment 88-17 for further explanation.</td>
</tr>
<tr>
<td>Public Involvement - I request that a copy of a notarized statement of other certification be provided that states that the notification for the document availability and comment period for the EA and Section 4(f) Evaluation were published in accordance with all applicable State and Federal Laws and Regulations.</td>
<td>The notarized statements announcing the notice of availability of the Revised EA have been posted on the Spokane County website at: <a href="http://www.spokanecounty.org/engineer/bigelowgulchforkerconnector.asp">http://www.spokanecounty.org/engineer/bigelowgulchforkerconnector.asp</a></td>
</tr>
<tr>
<td>Right-of-Way - There should be a clear and easily understood presentation to all property who may be required to give up property for Right of Way, including amount expected to be taken, notification of Individual legal rights including information procedures for reimbursed appraisal and legal expenses.</td>
<td>Spokane County will provide that information to property owners in the right-of-way during the early stages of project design.</td>
</tr>
<tr>
<td>Comment</td>
<td>Response</td>
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</tr>
<tr>
<td>Transportation – Access via frontage roads. The version of the EA we saw in 2006 showed nine paved lanes, including the frontage roads that would be at the end of the driveway where I live. Now there are no frontage roads shown.</td>
<td>The frontage road concept was proposed to the neighborhood but due to opposition from the affected residents, the concept was dropped.</td>
</tr>
<tr>
<td>Transportation - How accurate are the car counts models utilized for this project and can that model be accurately audited? I believe the report indicates a traffic volume for the road being built today will be achieved under this model by 2025 support a five-lane road.</td>
<td>A regional effort was undertaken to develop an interim transportation model set for use with the Bigelow Gulch EA (among other projects). FHWA, WSDOT and SRTC approved the use of the model volumes for the analysis included in the EA. Discussion regarding a 5–lane road was presented in section 3.2 of the Revised EA.</td>
</tr>
<tr>
<td>Transportation - The original project was supposed to connect crossing on Stoneman Road, and that was abandoned to go on Bigelow Gulch. I still think that the Stoneman connection would be a very good thing.</td>
<td>See the discussion on purpose and need in the Revised EA. Additional roadway facilities may become necessary as the Spokane Metropolitan area expands in the future but Stoneman Road does not satisfy the purpose and need for the Bigelow Gulch/Forker Road Corridor.</td>
</tr>
<tr>
<td>Access during Construction – Concern regarding traffic flow and access.</td>
<td>Spokane County intends to maintain access to businesses during construction and to maintain the flow of traffic on this roadway.</td>
</tr>
<tr>
<td>Construction and Vegetation - Need to control noxious weeds</td>
<td>The control of noxious weeds is an important consideration for all projects. Spokane County must comply with RCW Title 17 Weeds, Rodents and Pests and the requirements set forth by the Spokane County Noxious Weed Control Board.</td>
</tr>
<tr>
<td>Access – Concern to access mail boxes. Homeowners cross from the north side of Bigelow Gulch to the south side of Bigelow Gulch to pick up their mail.</td>
<td>The Hillyard Post Office has indicated that they will deliver mail on both sides since the new roadway will have paved 8-foot shoulders.</td>
</tr>
</tbody>
</table>

**January 2006 EA**

The 2006 EA issued January 27, 2006, included a 90-day review period. The normal review period for an EA/Section 4(f) Evaluation is 45 days. The review period for the project was extended an additional 45 days by the Board of County Commissioners of Spokane County at the request of the public. As with the Revised EA, the 2006 EA was made available for review at the following locations:

- Spokane County Public Works office
- Spokane County Public Works Website at http://www.spokanecounty.org/engineer/
- Argonne Public Library
- Spokane Public Library
The Notice of Availability and the 2006 EA document were provided directly to the following agencies and citizens:

- Elected officials, tribes, and city administrators for jurisdiction within the project area; and
- Regulatory agencies, cooperating agencies, and all other agencies that had expressed interest in the project.

Open house meetings were held at the Central Grange Hall on February 15, 2006 and at the East Valley Middle School on February 16, 2006 and were attended by approximately 330 people. The Notice of Availability of the 2006 EA and Notice of open houses were advertised as follows on the dates shown:

- The Spokane County Public Works website on January 27, 2006
- The Spokesman-Review on January 25, and 26, 2006 (Affidavit of Publication)
- The Spokesman-Review on February 9, 12, and 14, 2006 (Paid Advertisement)
- Posted notice of meetings on 4’ x 8’ signs located along Bigelow Gulch /Forker Road.

A two-hour Open Town hall Meeting was held the evening of February 27, 2006 at the Orchard Prairie School where approximately 50 residents attended and questioned Ross Kelley of Spokane County, Keith Martin and Steve Yach of WSDOT on the Environmental Assessment for Bigelow Gulch/Forker Road Urban Connector Project. Commissioner Todd Mielke was also present and discussed concerns regarding the project.

A public hearing was held March 22, 2006 from 5 pm to 8 pm at the Easy Valley Middle School. The notice of the public hearing was advertised as follows:

- The Spokane County Public Works website on March 7, 2006
- The Spokesman-Review on March 7 and 14, 2006
- Posted notice on seven 4’ x 8’ signs located along Bigelow Gulch/Forker Road.

The public hearing included verbal comments to be provided to a court reporter, written comments to be provided on comment forms, or follow-up written comments to be postmarked to Spokane County by April 28, 2006. The public hearing was attended by 148 people, and 33 people offered verbal testimony. The end of the public comment period was April 28, 2006.

**Summary of Comments**

During the comment period, January 27, 2006 through April 28, 2006, the following comments on the EA were submitted:
51 comment letters were submitted to Spokane County;
93 individuals submitted their comments on forms provided at the open house meetings;
one agency provided written comments; and
33 individuals provided verbal testimony at the public hearing, which was recorded in the Hearing Transcript.

A total of 557 comments were received from the letters and public testimony covering a variety of issues including transportation planning and alternatives, public involvement, NEPA process, groundwater resources and quality, vegetation and wildlife, and noise.

**Environmental Findings**

The Revised EA covered required areas as stipulated under (CEQ) regulations and NEPA. The following summarizes the environmental compliance activities of the major issues.

**Right-of-Way Acquisition**

One change in land use from the proposed Urban Connector would be from the property acquisitions necessary to widen, improve, and relocate the roadway in some locations. Approximately 101 acres of property would be acquired to accommodate new roadway surfaces, shoulder areas, cut-and-fill slopes, and roadway construction. In accordance with Title 23 CFR 635.309(c), prior to construction authorization, Spokane County will certify that the right-of-way (ROW) was acquired in accordance with the current FHWA Directives, relocation procedures, and consistent with requirements of the Federal Uniform Relocation and Real Property Policies Act of 1970, as amended.

**Recreation Resources (Section 4(f) of the DOT Act of 1966 and Section 6(f) of the Land and Water Conservation Fund Act)**

Pursuant to 42 U.S.C. 4332(2)(c), and 49 U.S.C. 303, in accordance with 23 CFR 771.135, there is no feasible or prudent alternative to the use of Section 4(f) resources. This includes the partial use of sports fields at the East Valley Middle School due to the roadway alignment and widening of Sullivan Road. The project includes all possible planning to minimize harm to the Section 4(f) properties.
resulting from such use. The Final 4(f) Evaluation is presented in Attachment G of this FONSI.

No Section 6(f) sites of Land and Water Conservation Fund will be impacted by the proposed project.

**Environmental Justice**

Partial acquisitions of properties abutting the existing right-of-way would be necessary to accommodate the roadway improvements. Partial acquisitions would occur along the entire length of the Project corridor, and would not result in a disproportionately high or adverse property take for minority or low-income populations.

All affected property owners will receive “just compensation” pursuant to Executive Order 12630 – Governmental Actions and Interference with Constitutionally Protected Property Rights, Washington State Constitution Article 1, Section 16 – Eminent Domain and the Uniform Relocation Assistance and Real Property Acquisition Policies Act as amended. Results of the business survey at the western end of the project indicated that the project would not disproportionately impact minority businesses or employment.

The proposed action would not result in disproportionately higher and adverse effect on minority and low-income populations identified within the project area in comparison to the impact on non-minority populations and/or low-income populations.

The analysis concludes that any adverse impacts expected as a result of the construction and operation of the Urban Connector Alignment, would not have a high and disproportionate adverse impact in the context of Executive Order 12898, DOT Order 5610.2 or FHWA Order 6640.23. Therefore this project complies with Executive Order 12898 and Title VI of the Civil Rights Act of 1964.

**Noise**

As summarized below, after analyzing effects on noise in the project vicinity caused by the proposed project, it has been concluded that noise would not rise to a level of significance. Construction noise would be temporary and localized, and would be mitigated to the extent practicable by using best management practices. Operational noise impacts would occur at relatively few of the homes along the proposed corridor. The number of noise-impacted homes is similar for existing conditions, future No Action, and the future proposed Urban Corridor Alignment. A total of 86 dwelling units were evaluated for noise impacts. Of these, a total of 21 dwelling units are impacted under existing conditions, 19 dwelling units would be impacted in 2025
under the No Action alternative, and 20 dwelling units would be impacted in 2025 under the proposed Urban Corridor Alignment. Noise abatement was evaluated for all impacted receivers according to WSDOT’s feasibility and reasonableness criteria. The installation of noise barriers at specific locations along Bigelow Gulch Road was found not to be feasible and/or reasonable under the WSDOT evaluation criteria. ROW noise walls would not be technically feasible along most of the Project corridor because most of the impacted houses require driveway access to Bigelow Gulch Road, so required gaps in the noise wall would negate the acoustical benefit of the wall. Visual screening proposed to alleviate visual impacts could reduce noise levels at some of those affected homes.

**Air Quality Conformity Statement**

The U.S. Environmental Protection Agency has established National Air Quality Standards for six common pollutants. The Spokane area is currently in attainment for ozone, sulfur dioxide, and nitrogen dioxide. Because portions of the project alignment are designated Maintenance Areas for carbon monoxide and PM$_{10}$ the project is subject to the federal Transportation Conformity regulations (40 CFR part 93). The Spokane Regional Transit Council (SRTC) has confirmed that regional emissions generated by the proposed project are included in the regional emission budget in the Transportation Improvement Plan. This project, as well as all others in the SRTC Transportation Improvement Program, conforms to the State Implementation Plan at the regional level. The Environmental Protection Agency (EPA) has approved the current State Implementation Plan for this area. The FHWA has approved the SRTC Transportation Improvement Program conformity analysis. At the project level, hot-spot carbon monoxide modeling demonstrates that carbon monoxide concentrations will not exceed the National Ambient Air Quality Standards of 35 parts per million (ppm) averaged over one hour or 9 ppm averaged over eight hours in the year of opening, or the design year. This project conforms to the State Implementation Plan and both federal and state Clean Air Act requirements. EPAs Mobile Source Air Toxics (MSATs) regulations and nationwide programs for emission reductions will prevent future air toxic impacts.

A PM$_{10}$ hotspot analysis (see Attachment A) of the project area was prepared according to EPA guidance (EPA 2006). The proposed project satisfies Transportation Conformity requirements for PM$_{10}$ for the following reasons:

- Spokane County Regional Clean Air Agency (SCRCAA) has prepared the PM$_{10}$ maintenance plan (SRCAA 2004), which demonstrates ongoing emission control programs will ensure the ambient impacts from combined sources within the maintenance area (including new and expanded roads such as the Bigelow Gulch Urban Connector) will be less than the allowable limits.
The Bigelow Gulch Urban Connector project is included in the regional Transportation Improvement Plan (TIP) prepared by the Spokane Regional Transportation Council or SRTC (SRTC 2006).

By comparison to historical PM$_{10}$ monitoring data for a monitoring station adjacent to busy roadways (the Latah Creek Neighborhood monitoring station), it is unlikely that Bigelow Gulch Urban Connector will cause a PM$_{10}$ hot-spot (i.e., cause ambient PM$_{10}$ concentrations near the road to approach allowable ambient limits).

In conclusion, analysis of the proposed action’s effects on air quality in the project vicinity indicates that none would rise to a level of significance.

**Floodplain Finding**

The project would cross 3,200 feet (approximately 3 acres) of B Zone and 400 feet of Unnumbered 100-year A Zone Federal Emergency Management Agency floodplain. The County would be required to obtain a Floodplain Development Permit and meet the requirements of not increasing the Base Flood Elevations by more than 1.0 foot within Unnumbered A Zones. The amount of proposed fill is expected to be insignificant in relation to the overall area of the natural storage and infiltration basin and would not impede or redirect flows within the floodplains. While the Urban Connector Alignment would result in irretrievable modification of local floodplains, the proposed action would not alter existing drainage patterns in a manner that would result in substantial onsite or offsite flooding when it is implemented with design and construction techniques meeting Floodplain Development Permit requirements. These changes would not result in an impediment or redirection of flood flows within the 100-year floodplains. The changes would similarly not contravene any existing Spokane County policies. Analysis of the effects of the proposed action on floodplains indicates that none would rise to a level of significance. Attachment D identifies design and construction mitigation commitments for Floodplains.

**Endangered Species Act (ESA) Finding**

In accordance with the Endangered Species Act (ESA), endangered and threatened species were evaluated using a biological assessment (BA). The BA was circulated to the U.S. Fish and Wildlife Service (USFWS) consistent with Section 7 consultation procedures.

The BA concluded that the project is “not likely to adversely affect” the following species under USFWS jurisdiction: Water howellia. The USFWS provided a concurrence letter on September 5, 2003.
Based on the conclusions stated above, none of the effects of the proposed action would rise to a level of significance. The environmental commitments defined in Attachment D will be adhered to during project design and construction.

**Farmland Finding**

Suitable soils and active farming occur within the project corridor. The Proposed Action will result in the use of approximately 50 acres of prime farmland as a result of widening Bigelow Gulch Road. In the mitigation commitments, Spokane County has indicated that some farmland within the right-of-way would be available for continued farming so long as crops and farming activities were compatible with the clear zone requirements of the project. The Urban Connector represents the least impact to farmlands, because the portion of the alignment through farmland follows the existing Bigelow Gulch Road rather than as an alternative route through undisturbed land, either agricultural or rural conservation. Analysis of the effects of the proposed action on farmland indicates that none would rise to a level of significance.

The project will be consistent with the Farmlands Protection Policy Act of 1981 (7 USC 4201-4209) and other applicable state and federal farmlands protection policies, orders, and guidance.

**Wetland Finding**

Approximately 0.71 acre of wetland would be impacted by the Proposed Action, of which approximately 0.49 acre of impact would be associated with two proposed crossings of Bigelow Gulch Creek. The remaining 0.22 acre of impact would occur to Wetlands 5 and 6 (associated with the unnamed creek along Forker Road); Wetland 14, a hillside seep just east of Forker Road; and a small portion of the southern tip of Wetland 1 that would be impacted by widening of the western end of Bigelow Gulch Road. Approximately 5.65 acres of wetland buffer would also be impacted, mainly associated with Wetlands 1, 3, 9, and 12.

Wetland mitigation will satisfy the requirements of Executive Order 11900, which states that the project must include all practicable measures to minimize harm and address applicable provisions of the Section 404 (b)(1) guidelines of the Clean Water Act. The affected wetlands are along the right of way and could not be avoided due to roadway design standards. Mitigation for wetland impacts would be based on the requirements set forth in the Spokane County Code Chapter 11.20.050(b) and (d)(2). Two sites have been identified for mitigation. Analysis of the effects of the proposed action on wetlands indicates that none would rise to a level of significance. The mitigation sequencing measures to avoid/reduce, minimize, and compensate for impacts are listed in Attachment D. The FHWA finds that there is no practicable
alternative to the proposed construction within wetlands. The Proposed Action includes all practicable measures to reduce impacts to wetlands that may result from the Proposed Action.

**Historic Properties (Section 106 of NHPA) Finding**

Archival review and tribal consultation, and field surveys identified no evidence of archaeological resources within the Area of Potential Effect (APE). Cultural resources assessments were conducted during 2004 and 2007 and archaeological resources and evaluated 16 historic properties for listing in the National Register of Historic Places. Eleven of the properties were determined ineligible for listing in the National Register due to lack of integrity, especially in regards to historic materials. DAHP and WSDOT concluded that there is a No Adverse Effect on the five historic properties found eligible for listing in the National Register.

In addition to consulting potentially affected tribes, WSDOT initiated coordination and consultation with the Washington State Department of Archaeology and Historic Preservation (DAHP) under Section 106 of the National Historic Preservation Act. In April 2004, DAHP sent letters on April 5, 2004 and July 13, 2007 to WSDOT that stated a finding of “no adverse effect” to historic and cultural resources as a result of the proposed project.

Based on the cultural resources analysis and coordination with the tribes and the findings of DAHP and WSDOT, none of the effects of the proposed action would rise to a level of significance. FHWA finds that the project will have no adverse impact on any identified or likely cultural or historic resources, and that the Section 106 coordination requirements for this project have been fulfilled.

**Geology and Soils**

As is typical of similar transportation projects, grading and filling activities would be necessary to lay roadway foundations and cut-and-fill activities would result in unavoidable, permanent changes to the topography and soils on 144 acres within the project area. The changes to site topography and soils would not create conditions of substantial erosion or loss of soil, nor would it result in a substantial loss of economic or ecological value or expose people or structures to loss or injury. The loss of these soils would not contravene any existing Spokane County policies. Unavoidable temporary and permanent project impacts on local geology and soil resources will not be significant with the use of a combination of project design; implementation of the required erosion and sediment control plans; and associated compliance with federal, state, and local permit conditions. Analysis of the effects of the proposed action on soils and geology indicates that none would rise to a level of significance.
Attachment D identifies design and construction mitigation commitments for Geology and Soils.

**Groundwater Resources**

During construction of the project there would be a possibility that fuels, oils, solvents, and other potentially hazardous materials may be introduced to the groundwater, which could result in an incremental increase in contamination of the aquifer. In addition, there would be potential for erosion and sedimentation (particularly in areas of erodible soils) associated with land clearing, cutting and filling, and other soil-disturbing activities. Dewatering may be required where groundwater is encountered during excavation.

Impacts on groundwater quantity and quality are possible, particularly if blasting is required because of the low storativity and high groundwater velocities for the shallow basalt aquifer.

During project operation, pollutant loading generated by road runoff on the 90.7 acres of impervious surface would enter the project’s stormwater detention and treatment system. Under current conditions, most of the stormwater runoff in the vicinity of the project flows off the roads and into roadside ditches, streams, or adjacent lawns where the stormwater either infiltrates into the ground, or in the case of Bigelow Gulch Creek and Forker Road Creek, mixes with stream flow and ultimately discharges into the floodplain west of Palmer Road. Under the proposed action, all stormwater generated from the roadway, including previously untreated areas and new impervious surface will be treated for quality and quantity.

Significant adverse impacts on groundwater resources will be avoided through compliance with the adopted Spokane Regional Stormwater Manual at the time of project design. Stormwater treated using appropriate Ecology-approved BMPs will meet or exceed Washington State groundwater quality standards for contaminants commonly found in stormwater and these water quality standards meet or exceed state drinking water standards.

Analysis of the effects of the proposed action on groundwater indicates that none would rise to a level of significance. The construction, water well protection, and operation measures listed in Attachment D were considered in this conclusion.

**Streams**

All streams in the project area originate in the project area and dissipate into the Rathdrum Valley, with no direct connections to the Spokane River or Little Spokane River. Construction of the proposed Urban Connector Alignment would require roadway crossings of Bigelow Gulch Creek (Bigelow Gulch subbasin), the removal
of riparian vegetation, the replacement and extension of two existing culverts, and realignment of open channel at those locations. In the Forker subbasin, the proposed action would include the realignment of approximately 400 feet of seasonal stream channel adjacent to the proposed detention pond and associated culverts. In addition, approximately 1,980 linear feet of channel would be realigned downstream of the detention pond and reconstructed. The channel would be designed following the Washington Department of Fish and Wildlife Aquatic Habitat Guidelines for restoration. Impacts would include the loss of riparian vegetation, and wildlife habitat and diversity.

During construction, drainage patterns would be temporarily disrupted while new drainage facilities are constructed and while new facilities are temporarily rerouted prior to final connections. Short-term localized increases in turbidity may occur.

Construction of the Urban Connector Alignment would modify existing surface drainage patterns, quantities of runoff, and constituents in the runoff. Roadside ditches and detention ponds would be built as part of the project to capture, convey, and treat runoff prior to discharge to the streams. Impervious surface area on the proposed Urban Connector would increase from 33.9 acres (current) to 90.7 acres (future). Under the proposed action, treatment of runoff from the impervious surface would reduce annual pollutant loading to streams.

Stormwater treatment systems will be installed that meet the requirements of the Spokane County Guidelines for Stormwater Management and Stormwater Management Manual for Eastern Washington.

Analysis of project effects on streams in the project vicinity indicates that none would rise to a level of significance. In reaching this conclusion, environmental commitments and mitigation measures for Streams listed in Attachment D were considered in reaching this conclusion.

**Vegetation and Wildlife**

The project would remove 37.8 acres of forest and grass habitat and 71.6 acres of non-forested agricultural fields, recreation fields, and areas modified by development, resulting in modification to habitat for white-tailed deer, elk, and other wildlife species. These losses would incrementally reduce the habitat available for foraging by deer and elk, raptors, and a variety of small mammals (e.g., shrews, voles, mice) and a variety of native and migratory songbirds.

Road-related wildlife mortality does currently occur on Bigelow Gulch Road and would continue and is likely to increase both without the project and under the proposed action due to expected increases in traffic volumes. The proposed wider roadway and wider clear zone on each side of the roadway would improve the field
of view for drivers along the roadway. The wider field of view would allow drivers greater time to react to wildlife visible in the roadway or within the clear zone. Some level of road-related mortality would likely occur with white-tailed deer and elk; however, it is unlikely that the mortality would represent a significant impact to the local populations.

Approximately 7.8 acres of existing roadway to be bypassed by the new Bigelow Gulch Road alignment would be restored to habitat for wildlife. Analysis of the effects of the proposed action on vegetation and wildlife in the project vicinity indicates that none would rise to a level of significance. The construction and operation measures listed in Attachment D were considered in this conclusion.

**Land Use and Displacement**

The proposed Urban Connector Alignment would not include any changes to the comprehensive plan land use designations or zoning. Approximately 50 acres of farmed land would be required for the roadway and associated facilities. Access to farmland use would not be prevented by the Urban Connector, and would better accommodate farm equipment due to wider shoulders, two travel lanes in each direction, and the center turn lane to provide easier road crossing than what currently occurs.

The Urban Connector would improve and provide a safer and efficient existing transportation connection between industrial uses in the cities of Spokane Valley and Spokane. The proposed Urban Connector Alignment would result in changes in access to and from Bigelow Gulch and Forker roads for some residential properties.

The project will require acquisition of property and removal of nine occupied structures and a number of outbuildings. Approximately 65 acres of temporary easements would be required during construction. Relocation assistance will be provided in the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended.

Analysis of project effects combined with other reasonably foreseeable projects that could affect land use indicates that effects will not rise to a level of significance. Although the county can change the zoning, which could affect land use, there are no current plans to do so. Any land use designations that change will be done in compliance with state requirements and local policies and plans. Relocations and acquisitions as a result of the proposed action will take place according to federal and state policies.
**Transportation**

The Urban Connector would straighten and expand East Bigelow Gulch Road and North Forker Road to a four-lane rural arterial with a gravel median and left-turn pockets at selected locations. The posted speed limit would remain at 45 mph, except where the speed limit would be lowered to 35 mph for a 0.75-mile segment from west of Jensen Road to east of Argonne Road, and for the urban section of roadway on Sullivan Road. Widening and straightening the Bigelow Gulch/Forker Road Corridor would accommodate a greater volume of traffic and decrease travel time for travelers using the route. This would improve traffic flow, ultimately decreasing traffic congestion and delays a beneficial impact for commuters in the region. Upon completion, the Urban Connector would become a more attractive route for freight traffic that travels between north Spokane and communities to the east. Widening, straightening, and reducing roadway grades of the East Bigelow Gulch Road/North Forker Road Corridor would mitigate the current safety concerns along this route, accommodate a greater volume of traffic, and decrease travel time.

The proposed project would result in a temporary increase in traffic congestion during roadway construction, and would improve traffic flow, decrease congestion and improve traffic safety.

Analysis of the effects of the proposed action on transportation indicates that they will not rise to a level of significance. Improvements in safety and capacity will be beneficial effects. Construction and operational impacts were considered in combination with proposed mitigation listed in Attachment D.

**Visual Quality**

The Urban Connector Alignment effects could include temporary changes in views as a result of construction; potential glare and light impacts; and permanent visual impacts resulting from topography and grade changes, removal of vegetation, and the creation of a wider roadway. Within the project area, Bigelow Gulch Road is not a designated scenic highway, and the Urban Connector Alignment would not damage officially designated scenic resources. The project area lacks scenic vista areas; consequently, the Urban Connector Alignment would not have any adverse effects on scenic vistas.

Construction of the Urban Connector Alignment would create temporary changes in views of and from the project area. The Urban Connector Alignment would result in some degradation to the current visual quality along the corridor. Analysis of the effects of the proposed action on visual quality in the project vicinity indicates that none would rise to a level of significance. The construction and operation mitigation measures listed in Attachment D were considered in reaching this conclusion.
Parks and Recreation

Approximately 3.42 acres of the recreation fields at the Easy Valley Middle School would be used for the proposed roadway as analyzed in the Section 4(f) evaluation. Mitigation, including replacement of the recreation fields, would be provided by Spokane County. Between Forker Road and Wellesley Avenue, the proposed Urban Connector Alignment would include 4-foot-wide bicycle lanes and 6-foot-wide sidewalks for a distance of 0.8 mile, while the Rural Roadway would include 8-foot shoulders as designated by Spokane County’s Regional Bike Plan.

Analysis of the effects of the proposed action on parks and recreation in the project vicinity indicates that none would rise to a level of significance.

Social and Economic Elements

The proposed action would not result in dividing or isolating the existing community or severing or bisecting community service boundaries. Impacts from the proposed project are expected to be limited to individual or small clusters of homes and outbuildings located along the alignment. No overall community changes are expected as a result of the Urban Connector Alignment.

The proposed roadway improvement would include construction of approximately 4,000 linear feet of new roadway within new right-of-way in the Weile Avenue area. Construction of the new roadway at that location would mean that approximately 5,000 feet of the current Bigelow Gulch roadway would be bypassed by the new alignment, which would result in a reduction in traffic along the northern loop of Bigelow Gulch Road in the vicinity of Orchard Prairie Road and the Central Grange. Residents using this area of the community would have greater ease traveling either by motor vehicle, bicycle, or as pedestrians due to the reduced traffic volumes along this section of Bigelow Gulch Road.

No impacts would occur to public services. Occasional construction-related delays may occur to commercial vehicles using the corridor. Construction of the project would not relocate any businesses but would require modified access to businesses at the west end of the project near Havana Street. Traffic delays may occur to commercial vehicles using along the corridor during construction. Businesses would remain open and access would be provided through the duration of the project, though temporary short-term delays may be expected.

With the exception of modified access at Old Bigelow Gulch, Forker, and Progress roads, access to Bigelow Road by school buses would remain unchanged. The proposed project would result in a more restricted movement of students between the East Valley Middle School sports fields and the East Valley High School. Fencing would be installed between the schools. Access would be provided by a crosswalk at
the intersection of Sullivan Road and Wellesley Avenue and either an overpass or pedestrian tunnel under the roadway. Construction of the proposed Urban Connector Alignment would result in a shift of traffic from Progress Road to Sullivan Road, which would be beneficial to the East Valley Middle School. Under current conditions, a majority of the traffic in the Bigelow Gulch Road/Forker Road corridor uses Progress Road, passing in front of the East Valley Middle School.

Analysis of the effects of the proposed action on social and economic elements in the project vicinity indicates that none would rise to a level of significance. The proposed mitigation listed in Attachment D were considered in this determination.

**Hazardous Materials**

A Preliminary Site Assessment was conducted for the proposed project in accordance with Section 447 “Hazardous Materials” in the WSDOT Environmental Procedures Manual. None of the inventoried hazardous materials sites found during the search are within the proposed urban connector ROW.

The potential impact of accidental spills during construction is not considered significant because current regulations require the construction contractor to implement a Spill Prevention, Containment, and Countermeasures (SPCC) Plan, and to conduct weekly inspections by a certified inspector to ensure the SPCC Plan is properly implemented.

Given the location of the proposed action, it is unlikely that construction would encounter significant amounts of contaminated soil or groundwater.

Analysis of the effects of the proposed action on known hazardous material sites within the project vicinity indicates that none would rise to a level of significance. The mitigation measures identified in Attachment D were considered in this determination.

**Attachments**

The Revised EA and the November 26, 2007 public hearing transcript is incorporated by reference into the FONSI. Copies of these documents are available upon request from Bill Hemmings, Spokane County Public Works Department, Division of Engineering, 1026 W. Broadway, Spokane, WA 99260; telephone (509) 477-3600, or on the Spokane County website at:
http://www.spokanecounty.org/engineer/bigelowgulchforkerconnector.asp
The following attachments are incorporated into this FONSI:

- Attachment A: Errata to Revised EA
- Attachment B: Notice of Availability of FONSI
- Attachment C: FONSI Distribution List
- Attachment D: Mitigation Commitment List
- Attachment E: Comments and Responses
- Attachment F: Public Hearing Comments and Responses
- Attachment G: Final Section 4(f) Evaluation

References

Published References


Personal Communications