Section 3
Environmental Scan
Environmental Resources

An Environmental Scan was conducted as part of the Northwest Foothills Transportation Study. This scan was performed to review whether specific environmental conditions in the project area could influence future road alignments. In the report, existing environmental conditions are outlined and measured against the future roadway network of possible alignments as presented to the public during the second Public Involvement Open House Meeting (PIM) on October 2, 2008. This allowed a broad-level environmental assessment of all possible alignments in the project area.

The following environmental topics were reviewed to assess the conditions and potential impacts in the project area:

- Floodway/Floodplain
- Rivers/Lakes/Streams
- Wildlife Reserves
- Fish/Wildlife Habitat and Movement Corridors
- Migratory Birds
- State and Federal Lands
- Wetlands
- Threatened, Endangered, and Special Status Species
- Cultural Resources
- Hazardous Materials

For detailed evaluation of the environmental conditions and findings, please refer to the Environmental Reconnaissance Memorandum dated October, 2008 in the appendix.

Resource Agency Coordination

Coordination letters were sent to the Bureau of Land Management (BLM), Idaho Department of Lands (IDL), and Idaho Department of Fish and Game (IDFG) on June 23, 2008. BLM and IDL are landowners within the study area. Agencies were requested to provide comments on any concerns about the project as well as to provide information on studies or data that would be relevant. A follow-up meeting was held with these stakeholders on June 25, 2008. The meeting provided an open forum to discuss environmental resources, and any knowledge or concerns agencies had regarding the area and potential road alignments.
Findings on Floodways or Floodplains

Numerous crossings or encroachments of floodplains are anticipated to occur in the project area. Typical impacts of floodplain and floodway encroachment include a rise in water surface elevation, increase in stream flow velocities, and a loss of floodplain storage volume. The City of Eagle Floodplain Ordinance (Eagle Municipal Code, Section 10-1-8-5) requires “compensating excavation” for loss of natural storage. Roadway encroachment in the floodplain areas would require mitigation measures to allow compliance with local ordinances. Any encroachment in the floodway would require mitigation in accordance with local and federal regulations.

The figure below also shows the floodplains identified in the City of Eagle Comprehensive Plan.

Findings on Rivers, Lakes, or Streams

Any plans for roadway construction in or near Willow Creek would need to include an assessment of water quality impacts, since this creek is listed on the 303(d) list for water temperature impairments. Some consideration may include leaving trees in place for shading to help minimize impacts to water temperature. In addition, erosion and sediment control efforts would be of importance both during construction and operation. Standard best management practices for erosion control may help to mitigate future concerns.
Fish and Wildlife Habitat or Movement Corridor Findings

The Foothills act as movement corridors that big game utilize to access different parts of their habitat throughout the seasons. The importance of these corridors is especially true for mule deer and elk in the study area. According to previous studies in the project area, lower elevation areas provide shallow snow levels, adequate food, sight and thermal cover, and limited disturbances for these animals.

According to IDFG, elements important for wildlife habitat preservation include the location, size, and quality of remaining habitat patches and connectivity of habitat patches both inside and outside of the study area. Future expansion of roadways in the vicinity should allow for continued movement of wildlife species. This could provide access to open habitat patches, both within and outside the study area.

In many locations in the foothills there are currently existing roads that are largely unimproved. Expanding these roads could impact the movement capabilities of elk and mule deer in the area, and could also increase the chance for vehicular collisions with these animals. Some potential mitigation measures that could influence game/vehicular collisions in the project area are: wildlife fencing, vegetation and habitat management, and wildlife undercrossings of roads.

The IDFG recommended a detailed survey and analysis be completed for future transportation planning efforts to best document all sensitive and game species found within the study area.
Migratory Bird Findings

Based on current enforcement by the U.S. Fish and Wildlife Service (USFWS), the Migratory Bird Treaty Act (MBTA) of 1918 cannot be used to restrict development of an area to preserve habitat, or maintain the presence of migratory birds.

Previous habitat studies in the area were concentrated mainly on the western portion of the study area. An updated field survey is recommended to include the eastern portion and to determine nesting locations of protected birds that would need to be avoided by potential roads.

Findings on State and Federal Lands

The largest encroachment on federally-owned land by proposed roadways occurs in the southwest and central portions of the study area. Two arterials and a collector pass through BLM land located in the southwest portion of the study area. Two arterials pass through BLM land in the central portion of the study area. The arterial proposed along Willow Creek Road passes through a corner of BLM property. The majority of BLM lands are traversed by alignments proposed by M3, namely the Palmer/Hartley Road, Linder Road, and their proposed connection to SH 16.

BLM and IDL were given an opportunity to provide input on land ownership and management issues during the project meeting held on June 25, 2008. Potential land exchanges and other issues were discussed. The IDL identified interest in future access to their land located between Aerie Lane and Woods Gulch. The westernmost north-south alignment in the east project area would provide this connectivity. ACHD will continue to work with these agencies to ensure that impacts to publicly owned land from potential roadway alignments are mitigated.
**Wetland Findings**

The most common potential for wetlands is associated with drainage riparian areas. According to previous studies, Big Gulch Creek and Little Gulch Creek do not contain any riparian vegetation within the western portion of the study area. Therefore, it is assumed that proposed alignments along or across these drainages should have minimal wetland disturbance. Willow Creek and Woods Gulch Creek may contain some riparian vegetated areas, as this area is largely undisturbed. There is potential for riparian areas along the several smaller drainages that contribute to each of the main drainages.

There are several man-made ponds in the study area. A proposed Palmer/Hartley Road collector could encroach upon the wetland mapped in that area by the National Wetlands Inventory (NWI). As identified in this study, where feasible, alignments may shift in order to avoid sensitive areas such as wetlands. A detailed wetland survey should be conducted along each alignment.

The need for formal wetland delineations will depend, in part, on the preferred alignments selected. The drainages described above would be considered Waters of the U.S. and any fill in these drainages would require a Section 404 permit from the Army Corps of Engineers.

**Findings on Threatened, Endangered, or Sensitive Species**

Proposed improvements to Willow Creek Road to arterial standards would likely impact identified areas of Aase’s Onion and could impact Slickspot Peppergrass. The collector road between Woods Gulch Creek and the proposed overpass to Spring Valley Creek may impact Aase’s Onion habitat. A proposed Palmer/Hartley Road collector from Beacon Light Road would likely have some impact on Slickspot Peppergrass habitat. The easternmost north-south collector road in the east project area will likely pass through Aase’s Onion habitat. Where feasible, conservation easements for sensitive species may be a reasonable mitigation measure to maintain species habitat in the general project area.

Presence of the burrowing owl and other Species of Greatest Conservation Need has not yet been confirmed. However, potential habitat for some of these species exists, including the borrowing owl. This species has been noted to be of particular concern to IDFG during the project meeting held June 25, 2008. These species will likely require more research in follow-up studies prior to finalizing roadway alignments.
Cultural Resource Findings

Based on data provided by the State Historical Preservation Society (SHPO), four linear cultural resources were identified that should be considered in future planning processes. They include State Highway 16, Goodale’s Cutoff, the Farmer’s Union Canal and the Boise to Pearl Wagon Road.

All roadway network alternatives are anticipated to connect to State Highway 16 in at least two locations in the west project area. Three interchanges are proposed along SH 16 as part of each alignment alternative. The Goodale’s Cutoff passes through the west project area bisecting the proposed M3 arterial connection to SH 16 and the proposed Palmer/Hartley Road collector alignments. The Farmer’s Union Canal passes through the south project area bisecting the proposed Linder Road and Palmer/Hartley Road alignments. These conflicts should be re-evaluated for potential impacts to these linear resources in future planning efforts.

No impacts are anticipated to occur to any of the sites identified for eligibility to the National Register of Historic Places. All sites identified for the register are in locations outside of the proposed road alignments in the project area.

No archeological sites identified by SHPO are considered eligible for the National Register of Historic Places. No archeological sites identified as having historical value would be impacted by any of the proposed alignments.

Hazardous Materials

No hazardous materials sites have been identified in the study area that would inhibit the location of proposed roadway alignments. Miscellaneous debris from dumping should be removed from the public rights-of-way before such land is acquired. With the evidence of shooting practice occurring at some of the debris sites located throughout the study area, contractors should be made aware of potential lead impacts to soils.

The need for Phase 1 Environmental Site Assessments will depend, in part, on the proposed roadway alignments selected. If buildings are to be acquired as part of the right-of-way, asbestos and lead paint inspections are recommended.
Recommendations of the Environmental Scan

Based on the environmental reconnaissance process for the Northwest Foothills Transportation Study the following recommendations are made:

- Detailed inventory of raptor and other protected bird nests has been recommended by Idaho Fish & Game (IDFG)
- Detailed wetland delineation will be necessary to support roadway alignment selection.
- More research is recommended by IDFG on the Burrowing Owl and its likely presence in the study area.
- Protection of Slickspot Peppergrass, Aase’s Onion, and the Burrowing Owl (if present) may impact future road alignments.
- Consider mitigation options for wildlife migration near future roads such as: wildlife undercrossings, wildlife fencing, and vegetation and habitat management.

The Environmental Scan roadway alignments map (Not the Preferred Network) shows which alignments were evaluated in the study area. A table representing the potential environmental issues associated with each alignment and the corresponding number is included on the following page.
### Roadway Environmental Issues

<table>
<thead>
<tr>
<th>Proposed Roadway Type</th>
<th>Road #</th>
<th>Proposed Roadway Location</th>
<th>Potential Issues or Concerns</th>
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</thead>
<tbody>
<tr>
<td>Arterial (Expansion of Existing Road)</td>
<td>1</td>
<td>Existing West Chaparral Road Northwest Portion of Study Area Along Willow Creek</td>
<td>- 100-year floodplain impacts to Willow Creek; Waters of U.S.&lt;br&gt;- Willow Creek is 303(d)-listed&lt;br&gt;- Potential Elk habitat impacts&lt;br&gt;- Potential Aase’s onion and possible slickspot peppergrass impacts</td>
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<td>M3 Arterial (New)</td>
<td>2</td>
<td>West-Central Portion of Study Area. Big Gulch Creek west to SH 16.</td>
<td>- Potential Slickspot Peppergrass impacts&lt;br&gt;- Goodales Cutoff impacts</td>
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<td>Arterial (New)</td>
<td>3</td>
<td>Southwest Portion of Study Area. Linder Road north to Big Gulch Creek</td>
<td>- 100-year floodplain impacts to Big Gulch Creek and Little Gulch Creek; Waters of U.S.&lt;br&gt;- Potential Slickspot Peppergrass impacts&lt;br&gt;- Farmer’s Union Canal impacts</td>
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<tr>
<td>Arterial (Expansion of Existing Road</td>
<td>4</td>
<td>Existing Big Gulch Creek Rd (Aeric Lane). Central Portion of Study Area Along Big Gulch Creek</td>
<td>- Potential Elk habitat impacts&lt;br&gt;- 100-year floodplain impacts to Big Gulch Creek; Waters of U.S.</td>
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<td>Arterial (Expansion of Existing Road)</td>
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<td>Willow Creek Rd</td>
<td>- 100-year floodplain impacts to Woods Gulch Creek; Waters of U.S.&lt;br&gt;- Potential Aase’s onion impacts</td>
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<td>South-Central to Southeast Portion of Study Area. East of Willow Creek Road to Brookside Lane</td>
<td>- 100-year floodplain impacts to Woods Gulch Creek; Waters of U.S.&lt;br&gt;- Potential Aase’s onion and slickspot peppergrass impacts</td>
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<td>Collector (New)</td>
<td>7</td>
<td>Southwest Portion of Study Area Palmer/Hartley Road north to Proposed Big Gulch Arterial</td>
<td>- 100-year floodplain impacts to Big Gulch Creek and Little Gulch Creek; Waters of U.S.&lt;br&gt;- NWI-mapped wetland encroachment&lt;br&gt;- Potential Slickspot peppergrass impacts&lt;br&gt;- Goodales Cutoff impacts&lt;br&gt;- Farmer’s Union Canal impacts</td>
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<td>M3 Internal Collectors (New)</td>
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<td>West Central Project Area</td>
<td>- 100-year floodplain impacts to Big Gulch Creek; Waters of U.S.</td>
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<td>Collector (New)</td>
<td>9</td>
<td>Central Portion of Study Area. Westernmost north-south alignment from Big Gulch Creek to Brookside Lane arterial</td>
<td>- 100-year floodplain impacts to Woods Gulch Creek; Waters of U.S.</td>
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<td>Northeast Portion of Study Area. North of Big Gulch Creek through SunCor property</td>
<td>- Elk habitat impacts&lt;br&gt;- Potential Aase’s onion habitat impacts</td>
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<td>Collector (Expansion of Existing Road)</td>
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<td>Existing Woods Gulch road. Southeast portion of Study Area Along Woods Gulch Creek</td>
<td>- 100-year floodplain impacts to Woods Gulch Creek; Waters of U.S.</td>
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<td>Collector (New)</td>
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<td>East Central Portion of Study Area. Easternmost north-south alignment from Big Gulch Creek to Brookside Lane Arterial</td>
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<td>Collector Overpass (New)</td>
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<td>Southeast portion of Study Area From Woods Gulch Creek through Shadow Valley to Brookside Lane</td>
<td>- Potential Aase’s onion habitat impacts</td>
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<td>Entire Roadway Network</td>
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<td></td>
<td>- Mule deer winter habitat impacts&lt;br&gt;- Burrowing owl habitat impacts</td>
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